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A Strategy for the Federal RCS

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Headquarters

2471 East Bayshore Road Suite 600 Palo Alto, California 94303 (415) 493–1600 Telex 171407

Detroit

340 N. Main Street Suite 204 Plymouth, Michigan 48170 (313) 459–8730

Washington, D.C. 1730 North Lynn Street Suite 400 Arlington, Virginia 22209 (703) 522-2118 Center II
Central Expressway
xas 75206
1-8565

k Plaza West-I rook, New Jersey 07662 B-9471

TES

Australia Centre, 7-9 Merriwa St., 110, N.S.W. 2072

(02) 498-8199 Telex AA 24434

Italy
PGP Sistema SRL
20127 Milano
Via Soperga 36
Italy
Milan 284–2850

01-439-4442 Telex 269776

JAPAN
INPUT Japan
Suite 1106
7-7-26 Nishi-Shinjuku
Tokyo
Japan 160
(03) 371-3082





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ABSTRACT

This study evaluates the federal market for remote computing services by means of interviewing major federal agencies and selected major vendors. Agency needs and plans were reviewed as well as the effect of new policies and procurement regulations. Vendor products and strategies were analyzed. Alternative approaches that Informatics could take were reviewed and recommendations made.



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IINTRODUCTION



INTRODUCTION

I

- This study examines the federal marketplace for remote computing services (RCS) vendors.
 - The products, services, pricing criteria for selecting vendors, the procurement process, and other factors affecting vendors are investigated through the results of interviews that were held with vendors and users during the research.
 - The responses of vendors are compared to their degree of success in the market and to the responses of agencies.
- The review of responses from vendors and agencies suggests opportunities for the consideration of Informatics.
- A profile of the vendor and agency respondents is included in Appendix A.

- 1 -

- 2 -

2. 3

II EXECUTIVE SUMMARY



II EXECUTIVE SUMMARY

A. FINDINGS

- Respondents from both vendors and agencies expect RCS business to increase,
 but the vendors are more optimistic, as shown in Exhibit II-1.
- RCS vendor respondents are optimistic in general about the business.
 - Several vendors noted that Washington has the greatest concentration of prospects of any area in the country.
 - An increasing volume of processing will be generated by this market on a regular basis.
 - Vendor respondents stated that when they are successful their returns tend to be significantly higher in this market than in other RCS markets.
 - More successful vendor respondents have confidence that their revenues will increase by 20% to 100% AAGR during the next two years.
- Respondents believe that pricing will be more competitive as well.

VENDOR AND AGENCY RESPONDENT OUTLOOK ON FEDERAL RCS BUSINESS

ASPECT OF BUSINESS	AGENCY OUTLOOK	VENDOR OUTLOOK		
 GROWTH OF RCS BUSINESS (AAGR) - DOD AGENCIES - CIVILIAN AGENCIES 	15% 10%	19% 16%		
• PRICING	MUCH MORE COMPETITIVE	MUCH MORE COMPETITIVE		
IMPACT OF NEW ADMINISTRATION ON AGENCIES	PERSONNEL SHORTAGE	PRESSURE TO GO OUTSIDE PERSONNEL SHORTAGE		

- Several vendor respondents spoke of being prepared to compete at lower price levels.
- Agency respondents commented on price reductions that they had recently obtained, or expected to be offered.
- Recompetes were noted as situations that should result in substantially lower prices.
- The policies of the new administration were seen by vendor respondents as
 offering the possibility that RCS business would expand enough to offset price
 decreases.
 - As Exhibit II-I indicates, the greatest impact of the administration is expected in personnel.
 - Shortages of personnel could make government agencies more reliant upon RCS vendors for both processing services and assistance.
- The level of RCS business being done through the Teleprocessing Service Program (TSP) can be obtained from GSA.
- Breakdowns of TSP information, such as the volume of business by vendor at specific or all agencies can be obtained by having the GSA Office of Procurement in Rosslyn, Virginia, prepare a report (cost between \$250 and \$500).
 - Magnetic tapes of data can also be bought. In some cases, not all work is reported under the correct corporate parent.
- RCS business that is done outside of the MASC and BA is not included in TSP data.

- Older contracts, facility management, and work that has been granted an exemption are not included.
- DOD agencies obtain exemptions for work that is critical.
- Some agencies are not subject to the TSP process.
- Some agencies make mistakes and grant sole source contracts when they should have used the TSP process, according to a GSA official.
- Vendor and agency respondents had differences in outlook on the relative importance of RCS applications, as shown in Exhibit II-2.
 - The level of importance given by agencies to batch and utility processing was lower than vendors expected. This may reflect an increase in the sophistication of users.
 - The importance of data base applications is an area of agreement, as data base capabilities are a strong market factor at present.
 - . Two RCS vendors were mentioned by agency respondents in relation to their data base offerings (i.e., FOCUS and NOMAD).
 - Four RCS vendor respondents noted that they were increasing or investing in data base capabilities.
 - Statistical packages, TSO, financial modeling, and project management are areas of importance to agency respondents as well.
- Exhibit II-3 reviews the outlook of vendor and agency respondents on the selection criteria which influence RCS business.
 - The location of hardware is not as important to agency respondents as it is to vendor respondents.

VENDOR AND AGENCY RESPONDENT OUTLOOK ON FEDERAL RCS APPLICATIONS

APPLICATIONS HIGH IN CURRENT USE	AGENCY OUTLOOK	VENDOR OUTLOOK
DATA BASE STATISTICAL ANALYSIS TSO TIME AGENCY SPECIFIC BATCH PROCESSING UTILITY PROCESSING	HIGH HIGH HIGH HIGH MEDIUM LOW	HIGH HIGH HIGH LOW HIGH HIGH
APPLICATION GROWTH		
DATA BASE STATISTICAL FINANCIAL/ECONOMIC PROJECT MANAGEMENT GRAPHICS APL	GROWTH SLIGHT GROWTH SLIGHT GROWTH SLIGHT GROWTH RAPID GROWTH RAPID GROWTH	RAPID GROWTH SLIGHT GROWTH SLIGHT GROWTH CONSTANT RAPID GROWTH RAPID GROWTH

VENDOR AND AGENCY RESPONDENT OUTLOOK ON VENDOR SELECTION

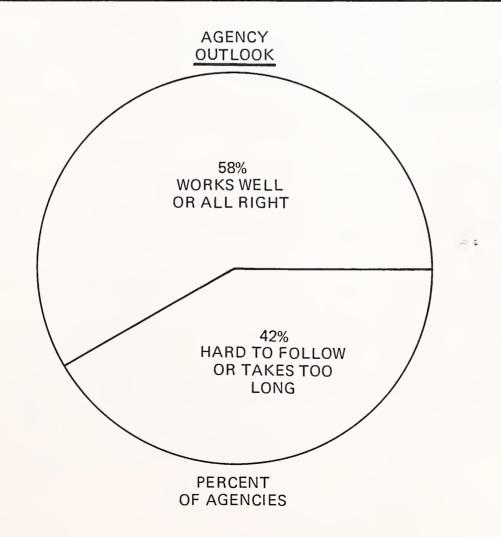
FACTOR	EVALUATION BY AGENCY	EVALUATION BY VENDOR
COST RELIABILITY OPERATING SYSTEM DOCUMENTATION PROPRIETARY PACKAGES UTILITIES TRAINING DATA BASE SYSTEMS INTERACTIVE RESPONSE REPUTATION CONSULTING/PROFESSIONAL	HIGHEST HIGH HIGH HIGH HIGH HIGH HIGH HIGH HIG	HIGHEST HIGH LOW MEDIUM MEDIUM LOW MEDIUM HIGH HIGH LOW
SERVICES	LOW	MEDIUM
HIGH LEVEL OF SUPPORT AND SERVICES	HIGH	HIGH HIGH
CLOSE FOLLOWUP AND CONTINUITY OF CONTACT A WELL PREPARED	HIGH	MEDIUM
GOVERNMENT BOOK	MEDIUM	MEDIUM
ROLE OF INFORMATION RESOURCE MANAGER	IN QUESTION	MEDIUM

- . Some agency respondents have learned that their work may be put on a remote system to provide better response time, more reliability, etc.
- . A few agencies still insist upon local hardware and try to incorporate this wish into their job specifications.
- One vendor with a large amount of business does not have a local presence, and feels that it is unnecessary.
- Among other selection criteria, the capabilities of the operating system, proprietary packages, documentation, and utilities are more important to agency respondents than to vendor respondents.
 - . This is another sign of growing sophistication among users.
 - . Together with the weight given data base as a selection criteria, there is considerable emphasis upon software products.
- Of course, cost is the dominant selection criteria noted by respondents.
- Reputation can be a factor in vendor selection.
 - Reputation in other markets or on a national basis does not influence agencies greatly.
 - Agency respondents related reputation to the performance and service provided by vendors to other government offices.
 - Three vendors commented on this as a justification for the level of services which they provide.
 - . These vendors are attempting to influence prospects everywhere in the market.

- Two vendors with large volumes of business noted that only the largest vendors could really influence procurement by offering a wide range of services, products, and whatever support agencies asked for.
 - They felt that other competitors would be forced to eventually compete with special areas of competence and products, as well as with price.
 - They pointed out that smaller competitors would be found deficient in numbers or in knowledge if they tried to spread themselves over the market.
- Vendors in general found the procurement process to be more difficult to live with than did agency respondents, as illustrated in Exhibit II-4.
- Agencies do not mind if the process reduces the number of vendors that they
 have to deal with.
 - Several agency respondents commented that they would like GSA to reduce the number of vendors by fiat, or by some test or set of criteria.
 - It is necessary to stand out in this atmosphere (e.g., be extensive in services and follow-up, have products of great current interest, have very low prices, offer unique approaches to service, etc.).
 - Capabilities and/or prices that will achieve market differentiation are also needed in view of the increasing sophistication of agency personnel, which has been noted elsewhere.
- As indicated in Exhibit II-5, some agencies are making plans or are receptive to steps that will bring minicomputers to their premises.
 - The present administration may delay this process.

VENDOR AND AGENCY RESPONDENT OUTLOOK ON THE PROCUREMENT PROCESS

VENDOR ATTITUDES	PERCENT OF RESPONDENTS WHO AGREE		
TAKES TOO LONG	100 %		
SPECIFICATIONS SLANTED	67		
ROULETTE-LIKE	67		
BENCHMARKING INVALID	45		
UNBALANCED BIDDING	45		
TOO MANY VENDORS	33		



VENDOR AND AGENCY RESPONDENT OUTLOOK ON ALTERNATIVES TO FEDERAL RCS

ALTERNATIVE	AGENCY ATTITUDE	VENDOR EXPECTATION		
USHS	PLAN 2 10% TO DO IT	EXPECT A LITTLE	11%	
		EXPECT A MODERATE AMOUNT	44%	
		ARE NOT AWARE	45%	
IN-HOUSE TELEPROCESSING	PLAN TO 2 16% DO IT	EXPECT A LITTLE	22%	
		ARE NOT AWARE	78%	
MINI/MICRO OR DDP	SEE A 87% TREND TOWARD	EXPECT A LITTLE	44%	
	160/110	EXPECT A MODERATE AMOUNT	11%	
		ARE NOT AWARE	44%	

- Agencies did note that they hoped to proceed in this direction, even if cutbacks did occur.
- A GSA official thought that steps toward in-house mini/micros or USHS would occur in spite of any cutbacks by the new administration.
- Although vendors in general do not expect much RCS work to go in-house to minis, three vendors described situations where that occurred.
- Four of nine vendors have plans to offer USHS or minis. One vendor plans to use a prepared argument against minis until he feels that it will not succeed. Then this vendor will offer a minicomputer approach.
- Exhibit II-6 compares profiles of three vendor respondents who feel they are successful.
 - Vendors A and B emphasized their strengths, and believed that they
 outclass other vendors in the market.
 - Vendor A emphasized the need to invest a sizable percentage of earnings in capabilities in advance, to retain this dominance.
 - This vendor feels that the best method of addressing the federal market is through a considerable investment of resources, even if losses are incurred in several years of operation.
 - This respondent also stated that no program of partial investment would equip a vendor to compete with the top four or five vendors in the market, as discussed before.
- Exhibit II-6 does illustrate that a vendor can be successful without the approach emphasized by vendors A and B. Vendor C emphasized price, and a carefully qualified group of marketing targets and set of services and capabilities.

EXHIBIT II-6

PROFILES OF "SUCCESSFUL" GOVERNMENT VENDORS

VENDOR C	SMALL	10%	50% OR MORE	20%	DBMS TSO STATISTICAL BATCH UTILITY	COST RELIABILITY PACKAGES NETWORK LOCATION	GOOD LEVEL OF SUPPORT (TO EXTENT NECESSARY). BID RIGHT JOBS AT VERY LOW COST.	EXPECT THEM. READY TO FIGHT.	FAIR BUT OTHER VENDORS TRY TO INFLUENCE.
VENDOR B	LARGE	10-20%	40%	10-20% OR BETTER	DBMS TSO ENHANCED STATISTICAL BATCH FINANCIAL	SLIGHTLY LOWER THAN VENDOR A	HIGH LEVEL OF SUPPORT. CLOSE FOLLOW UP ON SUPPORT. BID TOUGH. SELECT JOBS TO BID FOR.	EXPECT THEM. HAVE USHS.	FAIR BUT SMALL JOBS ARE TOO MUCH TROUBLE. TRY TO ONLY BID BIG.
VENDOR A	VERY LARGE	15%	100%	30-50%	DBMS TSO ENHANCED STATISTICAL BATCH FINANCIAL	HIGH VALUE TO MOST CRITERIA INCLUDING REPUTATION	HIGH LEVEL OF USER AND PROSPECT SUPPORT. DAILY FOLLOW UP ON SUPPORT. SEARCH OUT BUSINESS. BID ALMOST ALL.	EXPECT THEM. HAVE ARGU- MENTS PREPARED BUT WILL OFFER MICROS.	FAIR BUT CAN BE BENT.
CHARACTERISTIC OR VIEWPOINT	SIZE OF RCS BUSINESS	RCS GROWTH EXPECTED	RECENT RCS GROWTH (FEDERAL)	EXPECTED GROWTH AAGR (FEDERAL)	IMPORTANT APPLICATIONS (EMPHASIZED)	SELECTION CRITERIA (EMPHASIZED)	OTHER FACTORS	MINI/MICRO USE BY GOVERNMENT	PROCUREMENT PROCESS

- Services that will meet the needs of current customers and prospective work are emphasized. New people are added as business is added.
- Support is supplied from remote offices when needed.
- Application strength focuses on data base, statistical, and other utilities and packages used heavily in the marketplace.
- Some vendor respondents emphasized different market segments and other aspects of business in addition to or instead of price.
 - The market segments of newer users and data base capabilities were emphasized successfully by one respondent. This respondent feels that the capability for rapid development of applications with his data base packages will engender considerable growth.
 - Several vendor respondents emphasized facilities management and consulting services in selected market areas.
 - No vendors with a medium or small amount of business stated that they were trying to offer the breadth of services that large vendors did. However, several vendors noted that they attempted to provide service with follow-up and continuity to small numbers of customers and projects, but not in the same way as the large vendors did.

B. CONCLUSIONS

- Federal RCS business will continue to grow in total volume, at a rate greater than agencies have estimated.
 - The present outlook of agencies is influenced greatly by the reductions in budgets and personnel now taking place.

- The cost analysis, financial modeling, etc. that is required to prepare plans for budget cuts and consolidations will provide work.
- Computer processing will be increased by the need for financial analysis
 to plan and proceed with cuts and consolidation and to replace
 analytical and clerical functions.
- More complex data retrieval and manipulation will be needed by Washington agencies on a continuing basis.
- In view of personnel cutbacks, it should not be possible for minicomputers or mainframe systems to supply sufficient in-house capacity to meet needs.
- Interest in the use of more complex data base, financial modeling, and statistical capabilities will expand RCS usage more than agencies anticipate.
- Personnel at agencies who have been involved in data processing for many years and vendors who have experience and recent success expect the growth in business to exceed the average forecast of vendors.
 - Part of the increase in business will take place in business that does not follow the full procurement process.
- The net revenue for RCS vendors could increase less rapidly than total volume of work.
 - Agency respondents expect to realize substantial savings in the next few years due to more intensive price competition, particularly when recompetition takes place.
 - Agency and vendor respondents thought that recompetition could lead to savings of 20% to 40%.

- Several vendors are planning aggressive programs of lowered prices.
- Much of the aggressive pricing may be more cosmetic than actual.
- Except for a few vendors with a large volume of business, successful vendors restrict their activities to segments of the marketplace.
 - Segments are chosen which provide a match with the strengths and products of vendors.
 - Business is not sought at a large number of offices and bids are not prepared for all jobs that are available.
- Successful vendors follow structured plans of developing business, responding to the procurement process and serving customers and prospects.
- RCS vendors will be seeking jobs that are not subject to the full procurement process (e.g., jobs under \$10,000 which require only three bids, facility management, certain awards under the basic agreement, etc.).
 - These jobs should be more profitable and help to increase net revenue.
- Products, capabilities, and services of vendors are reviewed during the procurement process and the granting of contracts that do not follow the full procurement process.
 - These items have an indirect influence on the procurement process as well.
 - Procurement officials would rather have vendors win bids who have the strengths which they feel are important in relation to their agencies.

- USHS could also provide an opportunity to lower costs and prices for certain jobs and to differentiate between services.
 - Agencies are more receptive to such offerings.
 - Some vendors are offering or taking steps to offer USHS in view of needs they perceive.
- Opportunities are available to lower costs that not all vendors are taking advantage of.
 - Although some agencies may insist on local processing sites, it is of low importance to most agencies.
 - Vendors were not aware that the importance of local processing had fallen.
 - Selected services are supplied by some vendors to Washington customers from offices elsewhere in the country.
 - . This appears to be increasing.
 - . No vendor respondent was addressing the possibility in an organized manner.

7 4

C. RECOMMENDATIONS

- Prepare a planning process that addresses and controls activities of the Washington office as much as possible.
- Choose sectors of the market that appear to offer the most potential for business.

- These sectors should be chosen based on agency needs and the strengths of Informatics in products and capabilities.
 - Allowance should be made for contacts, friendships and other factors such as opportunities to initiate work on an ad hoc assignment.
- Service should be excellent to prospects and customers in the selected segments.
- Services to offices outside of these segments should be curtailed unless there are reasons to elevate these offices to a prospect level.
- Document service and contact so that continuity can be insured if different or new personnel respond to agencies.
 - Information on possible or planned procurements should be tracked.
 - Information on bids that are lost and jobs of interest that were not bid should be documented so that pricing, choice of market segments, and product strategies can be reviewed.
- Be prepared for intensified price competition.
 - Stay aware of the pricing window that exists in the market.
 - Utilize cosmetic techniques to make pricing appear more competitive.
 - Reduce pricing when selected bidding opportunities require lower prices.
- Strengthen offerings of software products in the group of those that rank of highest importance to agency respondents in market segments of interest.

- A stronger data base offering may be needed. Review opportunities to enhance RAMIS.
- Enhanced TSO, a financial modeling system with five- to ten-year projection capabilities and linkage to econometric data bases, and project management capabilities could also be desirable steps in software.
- Informatics should consider improvements in operating systems and utilities.
- Review whether development work in APL is susceptible to replacement by other vendors.
- Utilize the resources of Informatics elsewhere in the country to supply information, products, and services to the federal market.
 - This should expand Informatics' ability to respond to the market.
 - It presents an opportunity for cost reduction as well.
 - A definite step such as organizing a service support office for this purpose would lead the trend that is emerging in the federal market.
- Be prepared to offer a USHS or minicomputer to meet the growing interest of the Washington market.
 - This will present opportunities to lower prices in some bidding.
 - It will not preclude the ability of offering only RCS services to prospects who are not considering hardware.
- Consider steps that will reduce costs.
 - The use of a remote processing site should be continued.

- The provision of support and services from a service support office at another Informatics facility could present the opportunity to serve the Washington market with a smaller staff.
- Provide services and support to customers and a select group of prospects.
- Review any service or even bids to agencies where there is not an advantage such as pricing, products, services, or excellent contacts to ensure a good possibility of obtaining business.
- Consider offering facility management services if they can be supported from a remote office of Informatics.

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III THE FEDERAL MARKET AS SEEN BY RCS VENDORS

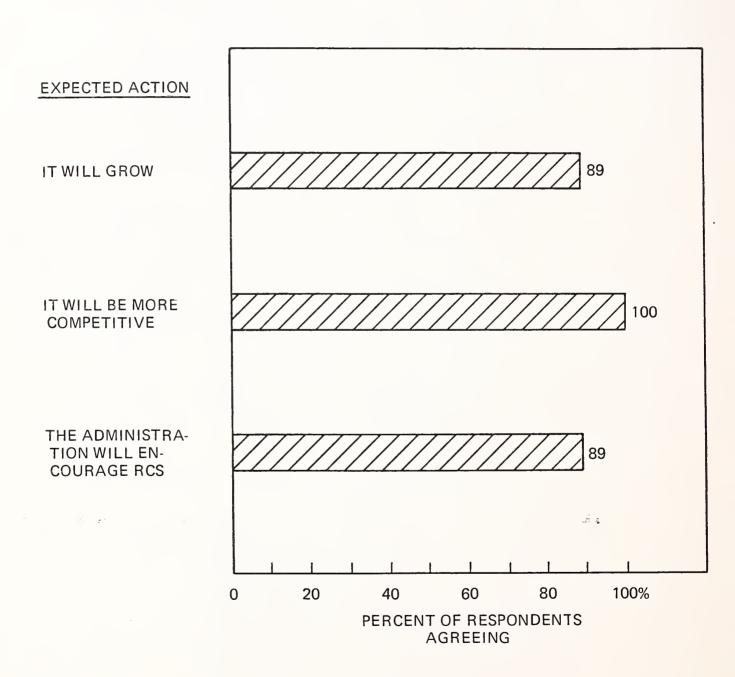


III THE FEDERAL MARKET AS SEEN BY RCS VENDORS

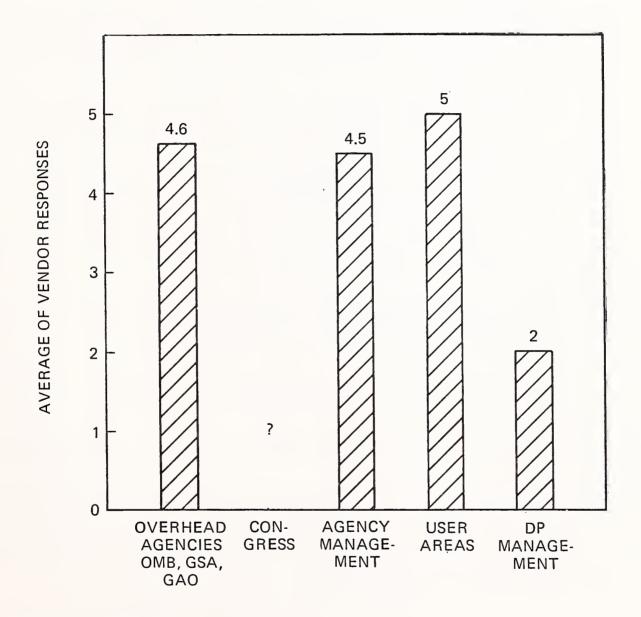
A. MARKET POTENTIAL

- Although vendor respondents expect the RCS market to grow and to be encouraged by the new administration, as shown in Exhibit III-I, competition is expected to intensify.
- Many vendors want to enter or enlarge their position in this market.
 - Vendor respondents pointed out that the market has the greatest concentration of RCS customers for computing services in one geographical area.
 - The return on gross has been higher for successful companies in this market as well, according to respondents.
 - The growth in business has been considerable for successful companies.
- Exhibit III-2 shows that vendors expect user areas, agency management, and overhead agencies to be very favorable toward the use of RCS.
 - This does not guarantee that in-house solutions will be opposed.

VENDOR RESPONDENT EXPECTATIONS FOR FEDERAL RCS BUSINESS



ATTITUDE TOWARD FEDERAL RCS USE EXPECTED BY VENDOR RESPONDENTS

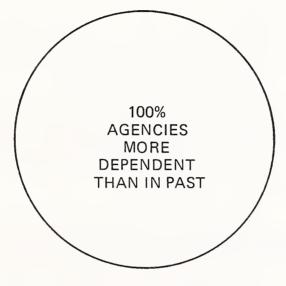


5 = VERY FAVORABLE 1 = UNFAVORABLE

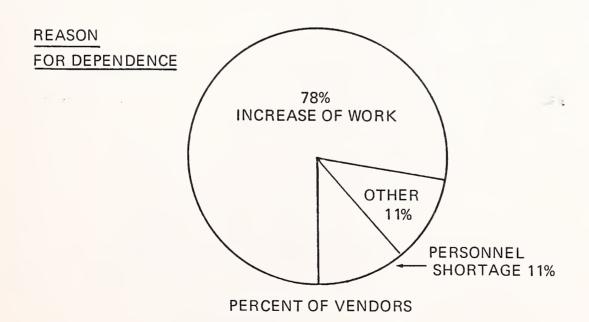
- It certainly does not guarantee that contracts will be obtained at a comfortable level of prices.
- It does suggest that the path of least resistance to solve processing needs will be RCS vendors.
- Vendor respondents believe that agencies have become more dependent upon vendors as a result of the policies of the new administration.
 - Exhibit III-3 indicates that 78% of vendor respondents feel that increasing work will be the dominant factor causing this dependence.
 - Shortages of personnel were also noted as a factor by vendor respondents. Such shortages could make it difficult for agencies to implement solutions other than RCS. It also makes agencies more dependent on support services of RCS vendors.
- Exhibit III-4 illustrates that RCS vendor respondents expect RCS business to grow faster at DOD agencies than at civilian agencies.
 - DOD agencies are expected to suffer fewer budget cuts.
 - More new projects may be approved for DOD agencies on the average.
- DOD agencies may have more personnel and new hardware made available to address work, however. Minis may be approved more easily for their use. As a result, large civilian agencies may be found to increase their use of RCS to a greater extent than DOD agencies.

DEPENDENCE OF AGENCIES ON FEDERAL RCS VENDORS FROM VIEWPOINT OF RESPONDENT VENDORS

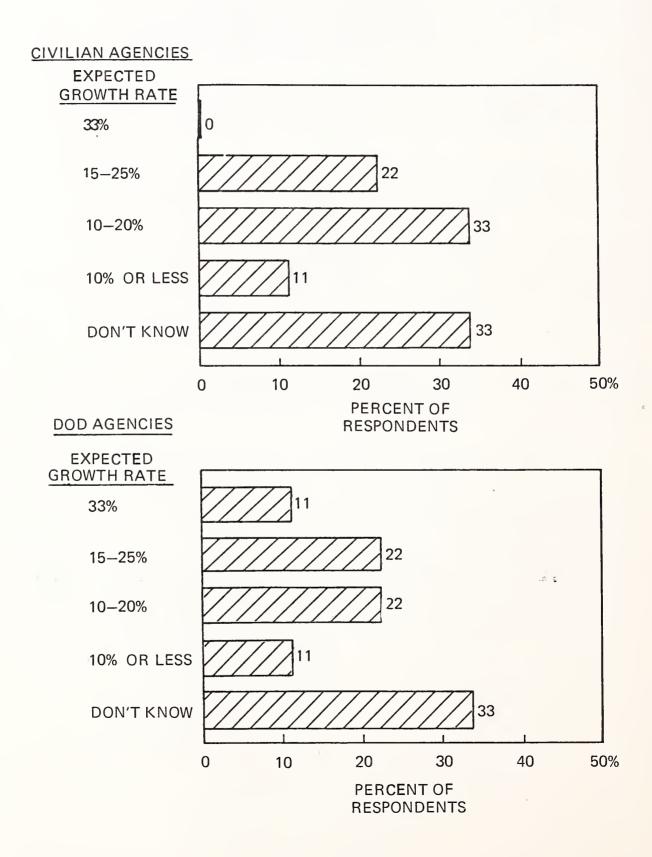
DEPENDENCE



PERCENT OF VENDORS



FEDERAL RCS GROWTH RATE EXPECTED BY VENDORS



B. RCS APPLICATIONS

- Exhibit III-5 indicates what vendors think the most important application areas are. Three of the five application areas that rank high concern older uses of processing in this market.
- Most vendors noted that they have enhanced TSO in order to obtain or hold onto TSO business. User friendly and utility features have been added.
- At least three vendor respondents are planning more powerful data base offerings and one respondent is planning a substantial investment in data base capabilities for the federal RCS market primarily.

C. SELECTION OF RCS VENDORS OR ALTERNATIVES

- Vendor respondents expect data base capability to be one of the most important selection criteria, as shown in Exhibit III-6. This exhibit shows that vendor respondents expect cost to rank first, and reliability and response times to rank high as well.
- The federal market has emphasized the availability of service when it is needed.
 - Vendor and agency respondents noted that alternatives cannot be utilized by government personnel when they encounter hardware, software, or response problems.
 - Funds are not available to use alternative or back-up services.

CURRENT FEDERAL RCS APPLICATIONS

HIGHEST USE	WHERE USED	OFFERED BY % OF VENDORS	CHANGE IN USE
TSO (ENHANCED)	CIVILIAN & DOD OLDER USERS	67%	NO CHANGE
STATISTICAL ANALYSIS	CIVILIAN & DOD MOST USERS	100	+
UTILITY PROCESSING (COBOL OR FORTRAN)	CIVILIAN & DOD OLDER USERS	100	_
DBMS	CIVILIAN & DOD NEW & OLDER USERS	100	+
ВАТСН	CIVILIAN & DOD OLDER USERS	89	-
MODERATE USE			
GENERAL FINANCIAL & ECONOMIC ANALYSIS	CIVILIAN AGENCIES NEWER USERS	100	+
SCIENCE & ENGINEERING	DOD MORE	56	NO CHANGE
TSO NOT ENHANCED	CIVILIAN & DOD OLDER USERS	33	-
LOWEST USE			
GRAPHICS	CIVILIAN AGENCIES NEWER USERS	67	+
APL	SAME AS ABOVE	67	+
AGENCY SPECIALIZED SOFTWARE	CIVILIAN AGENCIES OLDER USERS	56	NO CHANGE
PROJECT MANAGEMENT	VERY FEW USERS	100	NO CHANGE

SELECTION CRITERIA THAT VENDOR RESPONDENTS EXPECT AGENCIES TO UTILIZE

MOST IMPORTANT	AVERAGE OF RESPONSES (1, LOW TO 5, HIGH)
COST— RELIABILITY OF HARDWARE AND SOFTWAR INTERACTIVE RESPONSE— BATCH RESPONSE— DBMS CAPABILITY— LOCATION OF HARDWARE—	4.6
MEDIUM IMPORTANCE	
PROPRIETARY PACKAGES TRAINING SUPPORT DOCUMENTATION SUPPORT TECHNICAL SUPPORT CONSULTING (& PROF.) SERVICES NETWORK CAPABILITY GRAPHICS CAPABILITY	3.6 3.6 3.6 3.4 3.0
LOWER IMPORTANCE	
EASE OF SOFTWARE USE PROG., LANGUAGES, UTILITIES, OP. SYST., COMPATIBILITY TO IN-HOUSE, REPUTATION HARDWARE USED	2.6 (EACH)
TECHNICAL FEATURES — 2	

- Vendor respondents also feel that the level of service or support on software questions, operating instructions, etc., which government personnel requires, is generally larger than the service required in private industry, as shown in Exhibit III-7.
- Some RCS vendor respondents expect other services to compete for a possible supplement to their business with agencies, as illustrated in Exhibit III-8.
 - A small percentage of respondents feel that in-house hardware (USHS, in-house timesharing or dedicated minis) will obtain much business.
 - Three vendors expect facility management to obtain a moderate amount of business.
 - These respondents all offer or plan to offer this service.

D. PROCUREMENT PROCESS

- Although RCS vendors complain about the procurement process, only one respondent felt it was unfair, as shown in Exhibit III-9.
 - All respondents complained about the length of time the process takes.
 - Most respondents had other complaints about benchmarking, the number of vendors, unbalanced bidding, or the slanting of specifications.
 - Vendors noted that they could tell who were favored for certain bids by noting how the specifications were slanted.
 - Several vendors indicated that they were ready to help agencies prepare specifications because that could enable them to slant the bids.

OTHER SELECTION FACTORS NOTED BY VENDOR RESPONDENTS

FACTOR AFFECTING RCS BUSINESS

PROVIDING A HIGH LEVEL OF SERVICE TO USERS AND PROSPECTS

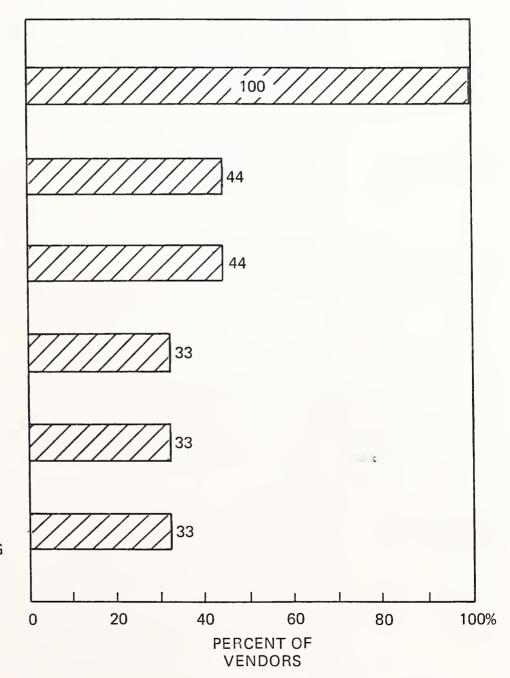
COMMITMENT TO MARKET

CLOSE FOLLOW UP OF SERVICE AND MARKETING CONTACTS

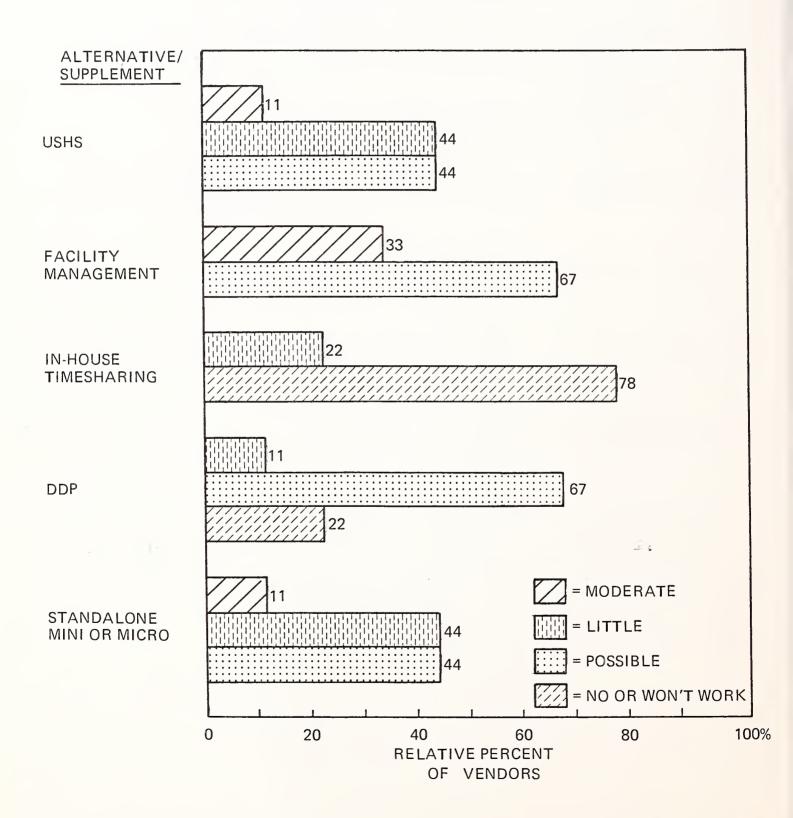
HAVING A WELL PREPARED GOVERNMENT BOOK

CONTINUITY OF SERVICE

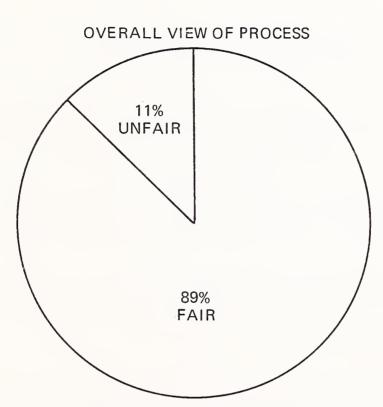
IMPACT OF IRM (CAUSING RECOMPETING, ENCOURAGING IN-HOUSE ALTERNATIVES, REDUCING RCS)



ALTERNATIVES OR SUPPLEMENTS TO FEDERAL RCS



VENDOR RESPONDENTS' ATTITUDE TOWARD PROCUREMENT PROCESS



UNFAIR ASPECTS OR PROBLEMS PERCENT OF RESPONDENTS

TAKES TOO LONG

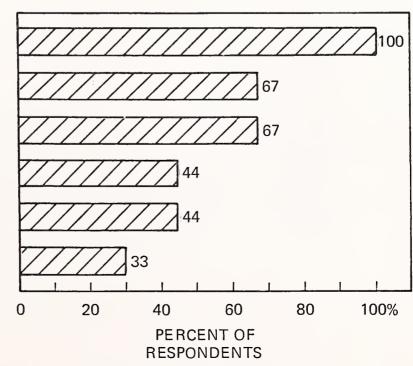
SPECIFICATIONS ARE SLANTED

ROULETTE-LIKE ASPECTS

BENCHMARKING NOT VALID

UNBALANCED BIDDING

TOO MANY VENDORS



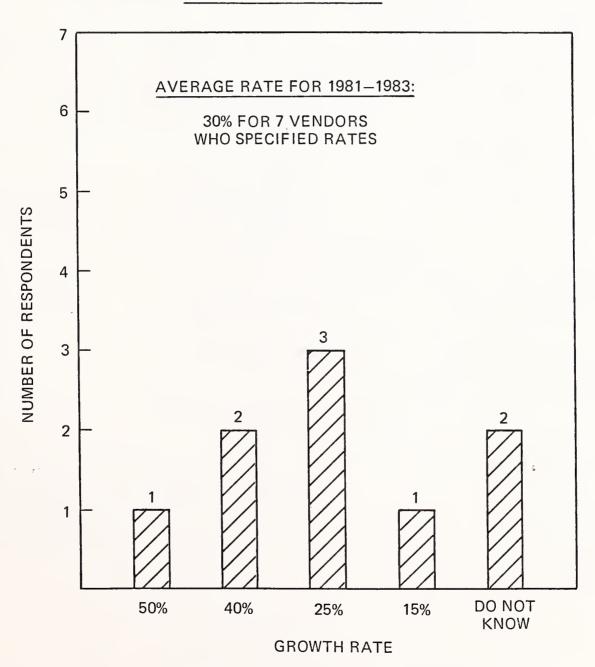
• Unbalanced bidding was noted by several vendor respondents as a method of winning business with bids that were not the lowest for processing charges. The estimate of cost for the length of the contract would supposedly be the lowest. The vendor would probably not be criticized if charges exceeded the bid, since the procurement officials might expose themselves to criticism.

E. VENDOR PERFORMANCE

- The growth of RCS business which RCS vendors expect is shown in Exhibit III 10.
 - Respondents expect their own revenue to grow at a faster rate than the volume of government business, as shown in Exhibit III-4.
 - The respondent who expects his business to grow at a rate of 50% in the next two years expects government business to grow at a net rate of 10% in that period.
 - The two vendors who expect their business to grow at a rate of 40% expect overall business by RCS vendors to grow at a rate between 15% and 20%.
- The opinions and comments that vendors made about each other are summarized in Exhibits III-II and III-I2.
- The two vendors who have the largest amount of government business tend to feel that vendors with small amounts of business are not really committed to the market and/or do not have the depth necessary to provide service. They both feel that some of the the small companies might suffer financially and in reputation if they win certain large contracts.

GROWTH RATE ANTICIPATED BY VENDOR RESPONDENTS

DISTRIBUTION OF RATES



VENDORS RATED AS STRONG BY MORE THAN THREE OTHER VENDORS

VENDORS RATED AS STRONG	NUMBER OF OTHER VENDORS, WHO NOTED STRENGTH	STRENGTHS MENTIONED	WEAKNESSES MENTIONED
CSC	9	AGGRESSIVE BIDDING, SOFTWARE PRODUCTS IN USE.	GOV'T ACTIONS OF 1980, CAN'T ABANDON OLD PRODUCTS.
BCS	8	FINDS OUT ABOUT WORK, BIDS A LOT, KNOWS HOW TO BID, GIVES GOOD SERVICE, HAS A GOOD BOOK.	CAN'T BID AS LOW AS SOME OF SMALLER COMPANIES.
MARTIN MARIETTA	5	BIDS AGGRESSIVELY AND LOW WHEN NEEDED, GIVES GOOD SERVICE, COMMITTED TO BUSINESS.	DOESN'T HAVE A LOCAL SYSTEM.
TYMSHARE	4	BIDS A LOT, HAS RIGHTS TO FOCUS, NETWORK KNOWLEDGE, COMMITTED.	NOT ORGANIZED AS WELL AS ABOVE VENDORS.
SBC	4	BIDS ENOUGH, HAS KNOWLEDGE AND SOFTWARE.	NOT AS COMMITTED, DOESN'T GIVE AS MUCH SERVICE.

ADDITIONAL COMMENTS ON OTHER VENDORS

VENDORS MENTIONED BY TWO OR THREE RESPONDENTS			
VENDOR	STRENGTH	WEAKNESS	
ADP	RESOURCES AND CAPABILITIES	NOT AGGRESSIVE	
AMS	FACILITIES MANAGEMENT	NOT ENOUGH DEPTH	
CDC	SHEER PROCESSING POWER	LIMITED MARKET APPROACH	
DATACROWN	HARD COMPETITOR APL KNOWLEDGE	NOT ENOUGH DEPTH	
FCSS	NOMAD & DATA BASE KNOWLEDGE		
GE	TOTAL CAPABILITIES	NOT COMMITTED TO MARKET	
NVIP	VERY AGGRESSIVE BIDDING	NOT ENOUGH DEPTH	

OTHER VENDORS MENTIONED

COMNET (GOOD FM APPROACH)
EDS (CLEVER AT OBTAINING FM BUSINESS)
INFORMATICS (TRYING TO BE A JUNIOR BCS)
MCAUTO (CREAM SKIMMING APPROACH)
OSCC (WILD BIDDER BUT DISORGANIZED SUPPORT)



• Several of the small vendors noted the lack of depth which they had, but stated that they were carefully selecting jobs to bid on. One vendor stated, however, that many bids were submitted by his firm and others which, if they won the contracts, would require them to search outside their company for software products, technical expertise, or even hardware.

IV THE USE OF RCS BY AGENCIES

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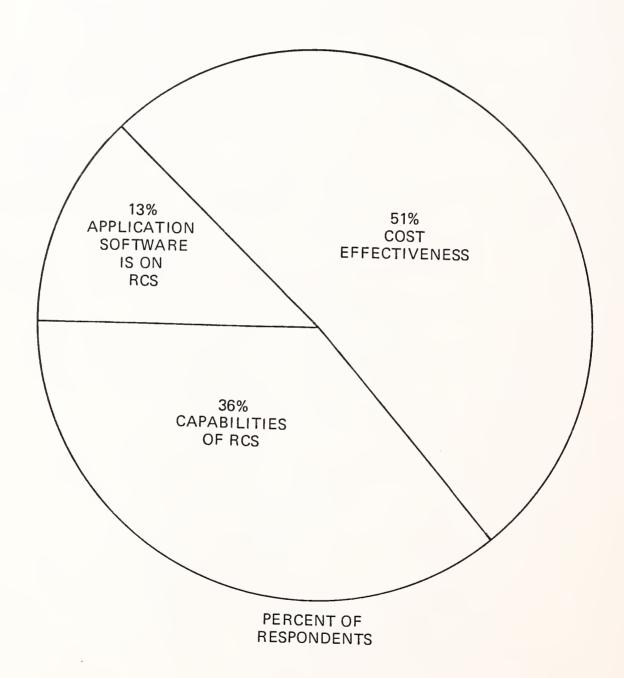


IV THE USE OF RCS BY AGENCIES

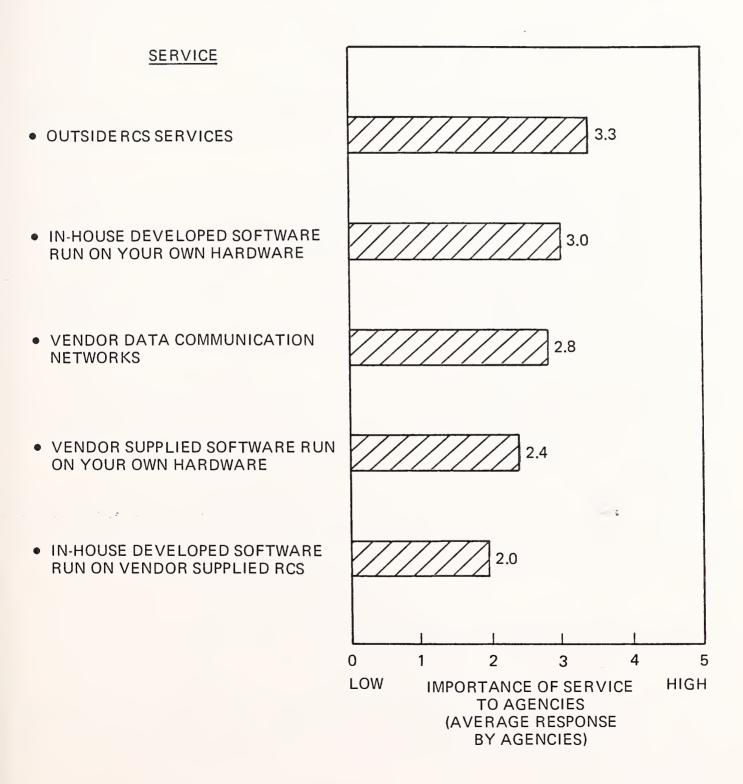
A. RCS USAGE

- Exhibit IV-1 illustrates that agencies use RCS most often because it provides a cost-effective solution to needs.
 - The capabilities of RCS vendors were also noted by more than one-third of agency respondents as a reason for using RCS.
 - The development of applications on RCS was regarded as a reason for using RCS by 13% of respondents. These users were inclined to avoid change or new development, if possible.
- RCS processing is regarded as the most important means of meeting DP needs, as shown in Exhibit IV-2, but in-house developed software running on in-house systems is not significantly lower in importance.
 - One Information Resource Manager (IRM) noted that the government was not that different from private industry and tended to lag developments in large companies by a small amount of time. He felt that the movement of work in-house from RCS vendors that has occurred in private industry was ready to occur in government.

WHY AGENCIES USE FEDERAL RCS



RELATIVE IMPORTANCE OF FEDERAL RCS (COMPARED TO OTHER DP RELATED SERVICES)



- The growth rates for RCS business expected by agency respondents is shown in Exhibit IV-3. This forecast includes TSP and other RCS business and related services.
- The applications which RCS processing is used for are ranked in importance by agency respondents in Exhibit IV-4.
 - Data base applications stand out.
 - Government offices have large amounts of data to collect, manage, process, and retrieve. Data base packages provide an effective means of fulfilling this need.
 - Many agency respondents noted that some of their applications were tied to the use of older data base packages, such as System 2000.
 - A number of vendors offer this package as a result. One vendor developed a link between System 2000 and a financial reporting package which ties agencies down even more.
 - Many agencies are anxious to use new data base products which facilitate development work. NOMAD and FOCUS were mentioned by respondents as an illustration of new data base capabilities.
- DOD agencies gave greater weight to project management, batch processing, graphics, and scientific and engineering applications than civilian agencies did. Other ratings were similar to those of civilian agencies.

B. EVALUATION OF RCS VENDORS

 Agency respondents thought that user areas were more favorably disposed toward vendors than management or DP groups, as shown in Exhibit IV-5. DP

GROWTH OF FEDERAL RCS

1981 TO 1983 GROWTH RATE

CIVIL AGENCIES FORESEE

10% AAGR

DOD AGENCIES FORESEE

15% AAGR

 AGENCIES FORECASTING GROWTH ESTIMATED RCS AND TECHNICAL SUPPORT TO BE AT \$130 MILLION/YEAR IN 1981

INCREASED USAGE

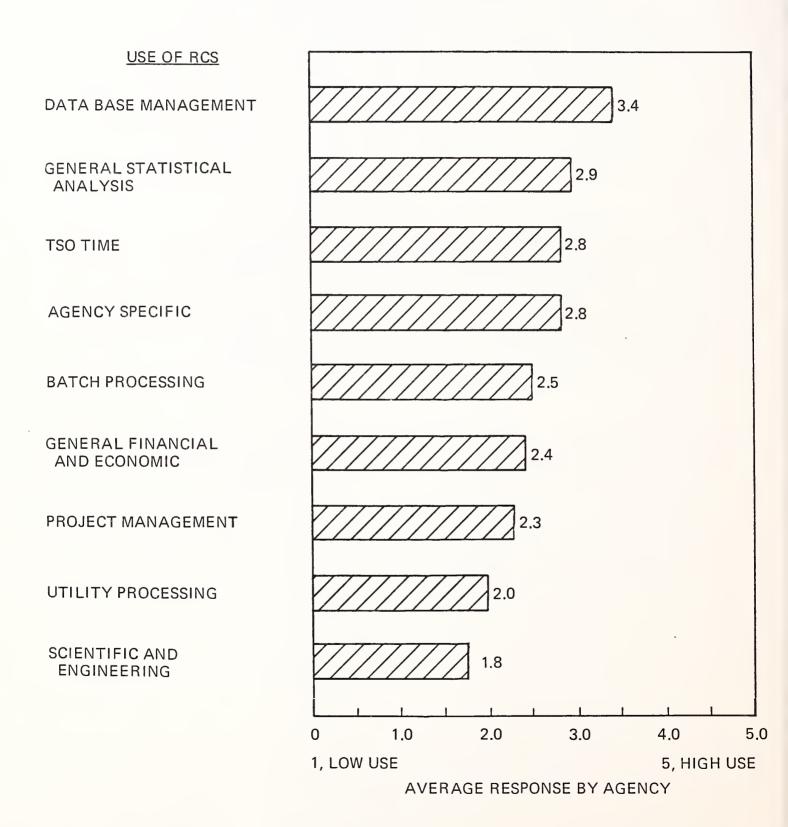
• IN THEIR AGENCIES

87% SEE INCREASE

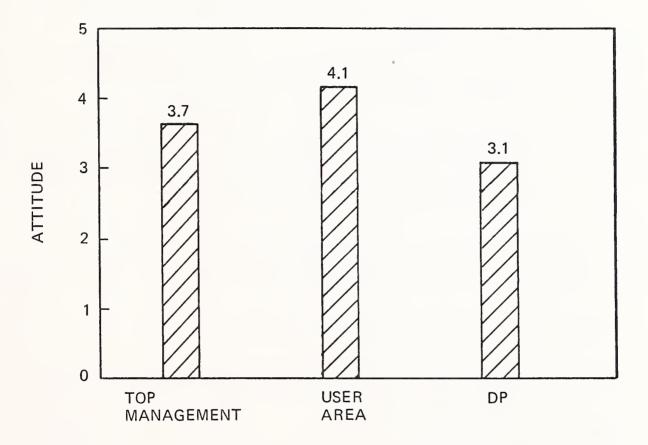
• IN THE GOVERNMENT

65% OF AGENCIES THINK USE WILL INCREASE

APPLICATIONS CURRENTLY ON FEDERAL RCS (AS REPORTED BY AGENCY RESPONDENTS)



ATTITUDE TOWARD USING FEDERAL RCS VENDORS (AS REPORTED BY AGENCY RESPONDENTS)



HIGHLY FAVORABLE = 5 NEUTRAL = 3

UNFAVORABLE = 1

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management is neutral about RCS and might be ready to consider other DP solutions that involved more in-house processing.

- Several IRMs noted that they wanted to be more flexibile toward in-house solutions as well.
- In general, however, agencies are satisfied with the capabilities and services offered by RCS vendors, as Exhibit IV-6 illustrates.
 - The range of software and the reliability of the operating system and application software illicit the highest responses.
 - The reliability of hardware, and technical features are rated lowest.

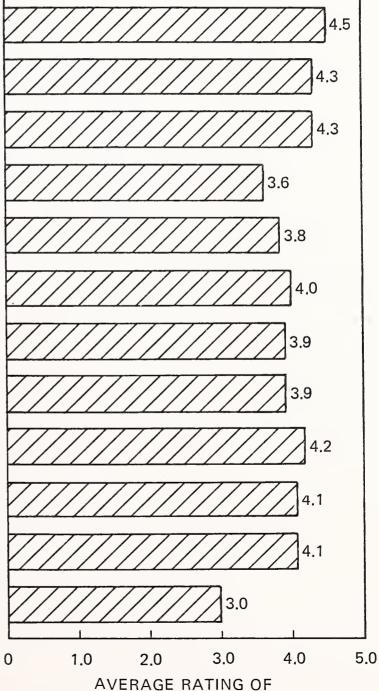
 This rating reflects lack of interest in specific hardware and technical features, rather than deficiencies in these areas.
- In spite of the level of satisfaction that is indicated, RCS vendors may not obtain the long contracts reflected in Exhibit IV-7.
 - As noted, there is more interest in in-house equipment.
 - Shorter contracts provide more opportunities for prices to be cut through negotiation.
- The selection criteria that agencies use for RCS is shown in Exhibit IV-8.
 - Of course, the procurement process is followed and final selection is based on finding the lowest cost service that meets the requirements stated.
 - The selection criteria shown in Exhibit IV-8 reflect items that will be incorporated into requirements or may influence the user or procurement officers.

SATISFACTION WITH FEDERAL RCS VENDORS (AS REPORTED BY AGENCY RESPONDENTS)

CAPABILITY

AVERAGE RATING OF SATISFACTION WITH VENDOR CAPABILITY

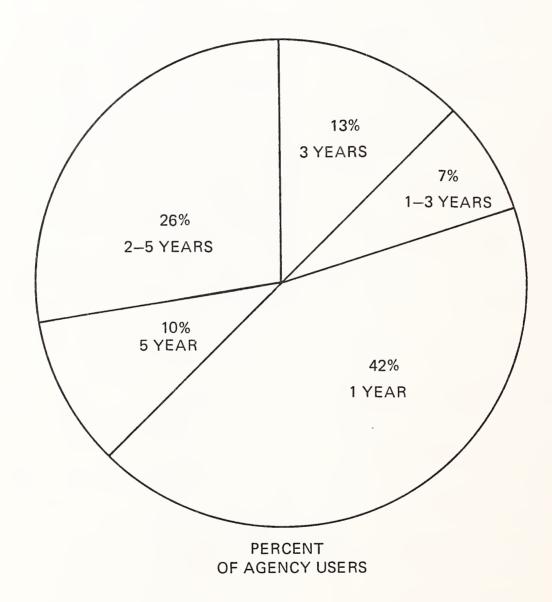
- RANGE OF SOFTWARE OFFERED
- RELIABILITY OF:
 - OPERATING SYSTEM
 - APPLICATION SOFTWARE
 - HARDWARE
 - DATA
 - COMMUNICATIONS NETWORK
- TRAINING/DOCUMENTATION
- EASE OF USE
- ON-GOING SUPPORT
- COST:
 - CHARGE STRUCTURE
 - AMOUNT CHARGED
- TECHNICAL FEATURES (E.G., GRAPHICS)



1 = LOW 5 = HIGH

SATISFACTION WITH VENDOR CAPABILITY

LENGTH OF FEDERAL RCS CONTRACTS

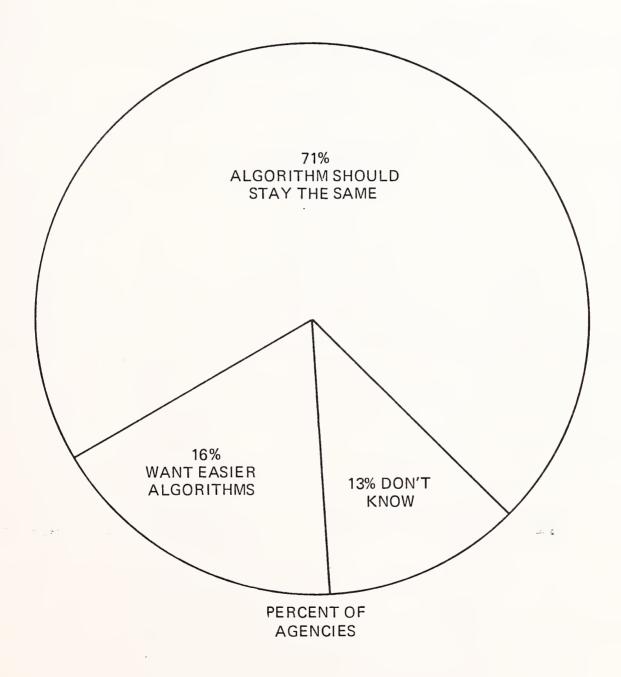


SELECTION CRITERIA THAT AGENCIES USE FOR FEDERAL RCS

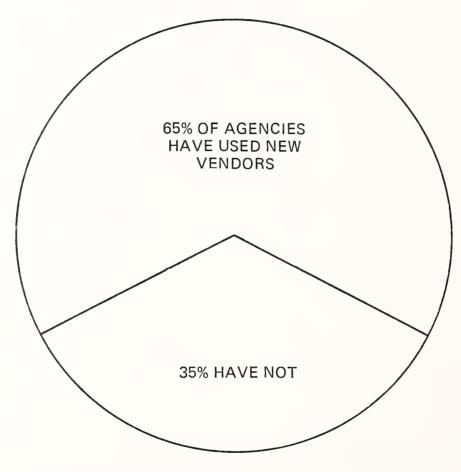
MOST IMPORTANCE	AVERAGE RATING BY RESPONDENTS (1, LOW TO 5, HIGH)
COST	4.9
RELIABILITY	
PROPRIETARY SOFTWARE PKGS.	4.6
OPERATING SYSTEM — DOCUMENTATION — DOCUMENTATI	4.5
PROPRIETARY PKG. CAPABILITIES -	
UTILITIES	4.3
TRAINING ——————————————————————————————————	4.3
DATA BASE	4.0
MEDIUM IMPORTANCE	
INTERACTIVE RESPONSE TIME -	
EASE OF USE COMM. NETWORK	3.8
COMM. NETWORK COMPATIBILITY TO IN-HOUSE SYST.	
HARDWARE USED	3.6
REPUTATION -	36
BATCH RESPONSE TIME	
PROGRAMMING LANGUAGES (COBOL)	3.4
LOW IMPORTANCE	
CONSULTING/PROFESS. SERVICES	3.1
LOCATION	2.8
TECHNICAL FEATURES -	• 2.2

- The selection criteria in general seem to reflect a growth of knowledge in the government market. Location of hardware, programming languages, batch response, and compatibility to in-house are rated lower than they would have been several years ago.
- The attitude of agencies toward the algorithms that vendors use to charge their use of RCS services is shown in Exhibit IV-9.
 - Although 71% of respondents felt that they did not want to change algorithms, many respondents expressed feelings that the charging algorithms and volume discounts had been designed by vendors to provide an attractive picture, yet generate a high return.
 - Agencies also noted that it would be too much trouble to investigate charging algorithms further. Meeting data processing needs and following the procurement process gave them enough to do.
- Exhibit IV-10 indicates that new vendors have been used by 65% of agency respondents in the past two years.
 - Respondents thought that the frequency of using new vendors was increasing.
 - Several procurement officers and one IRM stated that changes of vendors had advantages. They thought vendors were encouraged to perform well and hold bids down if change was likely.
- Exhibits IV-10 and IV-11 indicate the extent to which vendors were mentioned during interviews. References to computer manufacturers were not included.

THE ATTITUDE TOWARD CHARGING ALGORITHMS



USE OF NEW VENDORS IN PAST TWO YEARS



VENDORS MENTIONED	FREQUENCY
ADP	1
BCS	3
COMNET	1
COMPUSERV	1
CSC	1
INFORMATICS	1
MARTIN MARIETTA	2
TYMSHARE	1
MANY VENDORS	6
WILL NOT NAME	16

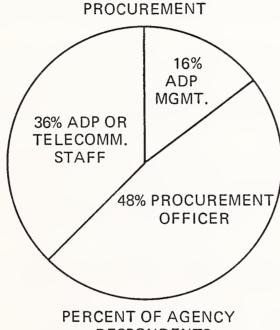
VENDORS MENTIONED BY AGENCIES

VENDOR	MENTIONED AS AN RCS PROCESSOR BY AGENCIES
BCS CSC MARTIN MARIETTA COMNET TYMSHARE ADP COMPUSERV INFORMATICS LITTON NVIP OSI REFERRED TO "MANY" VENDORS WOULD NOT NAME VENDORS	7 5 3 2 2 1 1 1 1 1 1 3 3

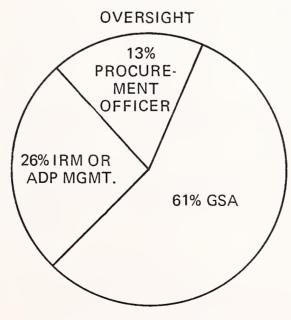
C. PROCUREMENT

- Forty-seven of the agency respondents stated that none of their contracts were sole source.
 - Some of the agencies are not subject to GSA controls and they can limit the number of bidders.
 - Agencies that are subject to GSA rules can grant sole source contracts below \$10,000. A review of a printout at the procurement office of GSA revealed that 10% of the business given to RCS vendors by a group of agencies was below \$10,000 in size.
 - There is business exempt from the TSP program, including work under older contracts, and jobs granted under waivers of rules.
 - GSA also points out that agencies can make mistakes and award contracts that should have gone out for bids.
 - Some respondents stated that all RCS business is sole source.
- The administration of procurement and oversight is shown in Exhibit IV-12. The role of the IRM appears in regard to oversight, but this official will also play a role in procurement, since procurement officers will report to him in most situations.
- Over half of agency respondents think that the procurement process worked well or had no problems, as illustrated by Exhibit IV-13.
 - Only 26% of respondents feel that the process takes too long.
 - A GSA offical stated that the total length of time is comparable to the time that a decision would take in private industry. He felt that there

ADMINISTRATION OF PROCUREMENT AND OVERSIGHT



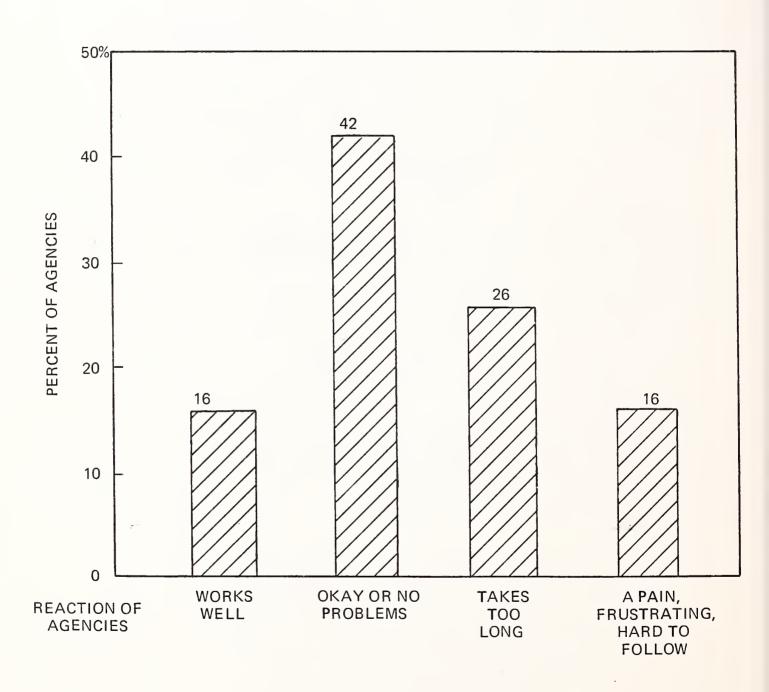
RESPONDENTS



PERCENT OF AGENCY RESPONDENTS

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PROCUREMENT PROCESS AS SEEN BY RESPONDENT AGENCIES.



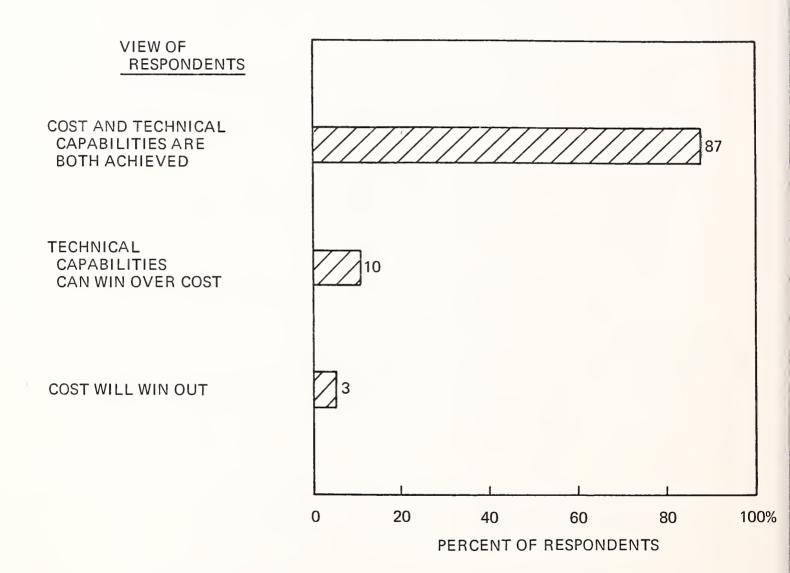
could be a slowdown during the evaluation of vendors if procurement personnel did not handle procedures in a timely manner.

- As Exhibit IV-14 indicates, agency respondents think that the procurement process achieves both low cost and technical capabilities.
- Benchmarking is not done for all jobs that TSP vendors run; Exhibit IV-15
 illustrates this.
- Benchmarking was not criticized by agency respondents, but over half of the respondents felt that the whole process of minimizing costs had an effect upon the ability to use computing effectively, as shown in Exhibit IV-16.
- Exhibit IV-17 illustrates the effect of including conversion costs and complying with OMB circular A76, which requires in-house alternatives to be evaluated against RCS before proceeding with a decision.
 - In regard to the latter, DOD agency respondents feel that they have more latitude to act.
 - The respondents who felt it was easy to comply with OMB circular A76 generally said that all they had to do was avoid consideration of inhouse alternatives.

D. ALTERNATIVES TO VENDOR TELEPROCESSING

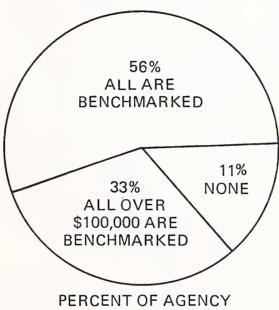
- Fifty-eight percent of agency respondents do not consider alternatives on a regular basis.
- Consequently, it is understandable that Exhibit IV-18 shows that 61% of agencies do not have any plans to change RCS usage.

WEIGHTING OF COST VERSUS TECHNICAL FEATURES BY RESPONDENT AGENCIES



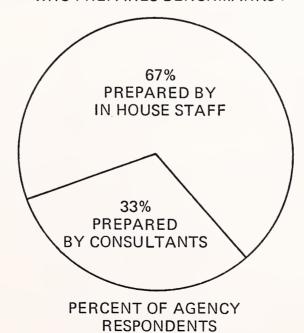
THE USE OF BENCHMARKING

WHAT PERCENT OF JOBS ARE BENCHMARKED?

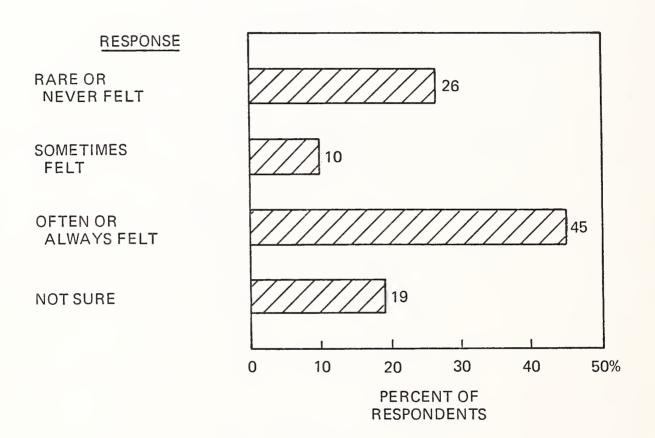


RESPONDENTS

WHO PREPARES BENCHMARKS?



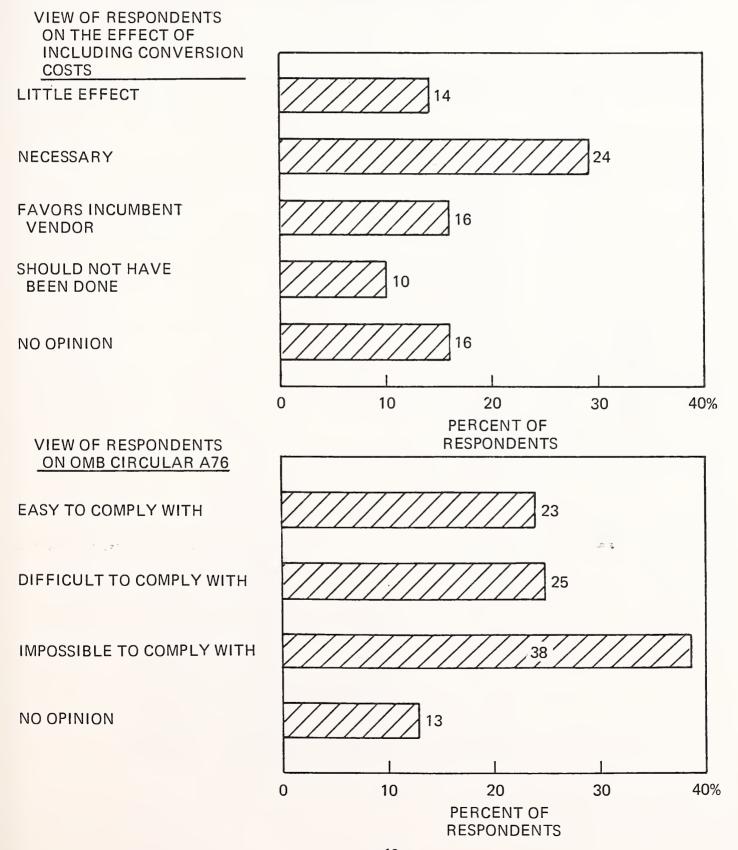
EFFECT OF MINIMIZING PROCESSING COSTS ON THE USE OF DP



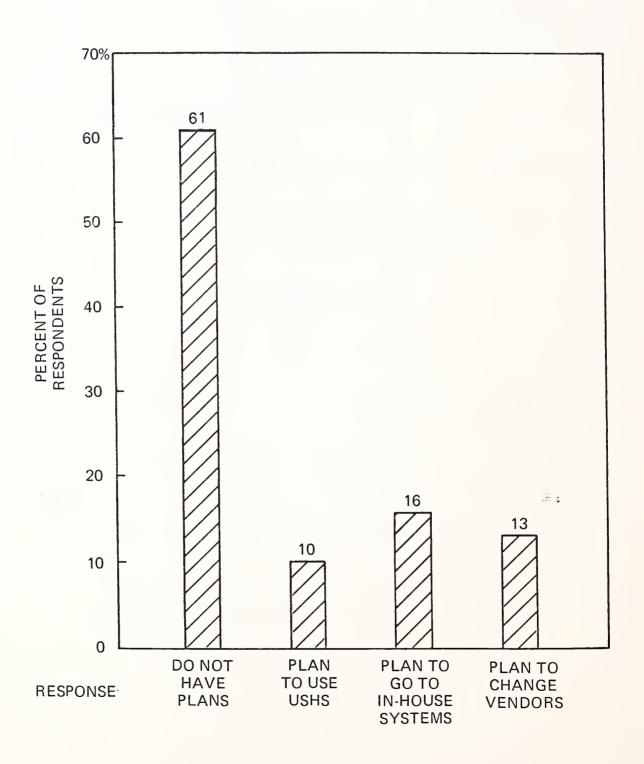
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OTHER EFFECTS ON FEDERAL RCS BUSINESS



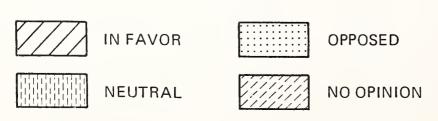
CHANGES IN FEDERAL RCS USAGE EXPECTED BY AGENCIES



- Thirty-nine percent of agency respondents do have plans to change, however, and a movement toward in-house hardware seems to be ready to take place.
- The attitude toward in-house teleprocessing, illustrated in Exhibit IV-19, indicates that a sizable percentage of agency respondents would be disposed toward letting this occur.
- More in-house teleprocessing and/or the use of minis and micros by agencies seems likely to occur.
- Exhibit IV-20 indicates that a sizable percentage of vendor respondents expect such changes.

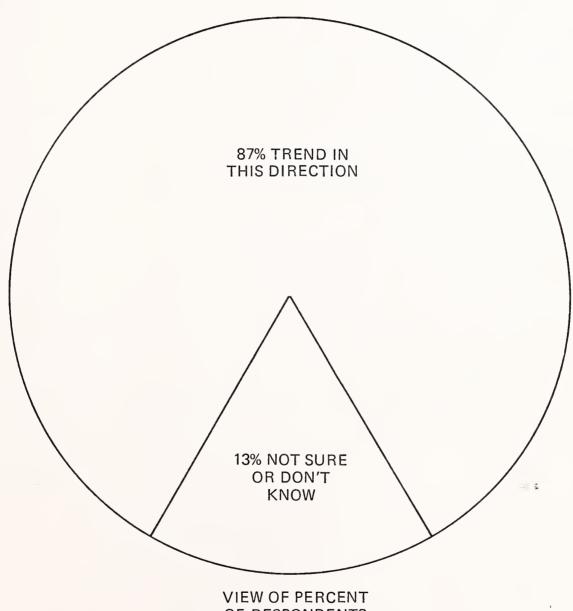
ATTITUDE TOWARD IN-HOUSE TELEPROCESSING

AGENCY ATTITUDES GROUP 26 MANAGEMENT 19 19 20 40 50% 10 30 15 **USER** 40 50% 10 20 30 26 DP 40 50% 0 10 20 30



TRENDS FOR THE USE OF DDP OR MINI/MICRO

(AS VIEWED BY AGENCY RESPONDENTS)



OF RESPONDENTS

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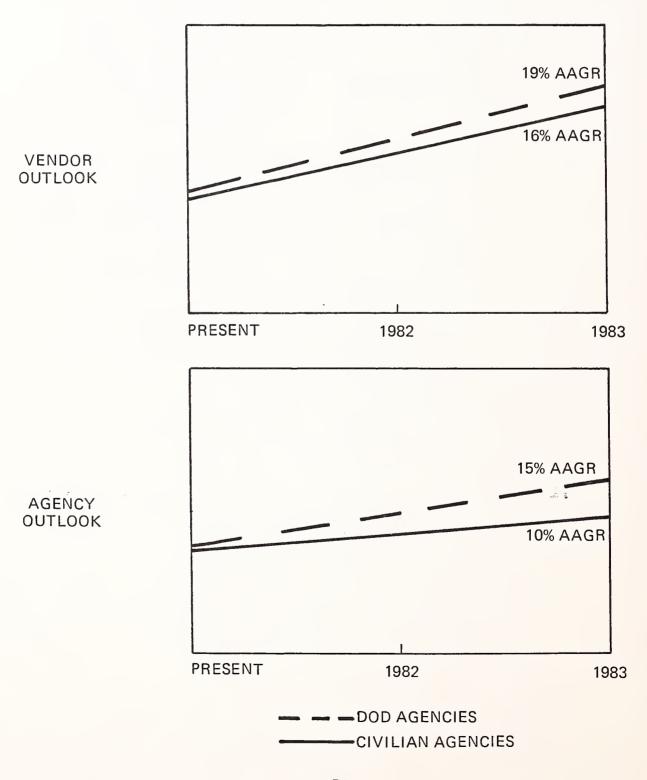


V DIFFERENCES IN VENDOR AND AGENCY OUTLOOK

A. THE FEDERAL RCS BUSINESS

- Exhibit V-1 shows that vendors expect a higher growth rate in the use of services than agencies. Several vendors expect rates of growth to be between 20% and 30%, which diverges considerably from the outlook of the agencies.
- The ranking of applications by vendor and agency respondents in Exhibit V-2 indicates areas of agreement and disagreement.
 - Batch and utility processing are not as important to agency respondents as vendors think they are.
 - The importance of agency-specific processing and project management to agencies are underestimated by vendors.
- In order to gain a better picture of the applications which should be investigated further or changed in emphasis by vendors, the changes in volume of RCS applications should be considered, as shown in Exhibit V-3.
 - Data base applications stand out as a growing area of high present importance. Vendors need to position themselves in this application area.

GROWTH OF FEDERAL RCS BUSINESS AS REPORTED BY RESPONDENTS



CURRENT FEDERAL RCS APPLICATIONS AS REPORTED BY RESPONDENTS

APPLICATION AREAS ORDERED BY AGENCY RANKING	AGENCY RANKING (5, HIGH TO 1, LOW)	VENDOR RANKING
DATA BASE MANAGEMENT	3.4	Н
GENERAL STATISTICAL ANALYSIS	2.9	Н
TSO TIME	2.8	Н
AGENCY SPECIFIC	2.8	L *
BATCH PROCESSING	2.5	H *
GENERAL FINANCIAL AND ECONOMIC	2.4	M
PROJECT MANAGEMENT	2.3	L *
UTILITY PROCESSING	2.0	H *
SCIENTIFIC AND ENGINEERING	1.8	M
GRAPHICS	1.8	L
APL	1.8	L

^{*}SIGNIFICANT DIFFERENCE IN RANKING NOTED.

CHANGE IN VOLUME OF FEDERAL RCS APPLICATIONS

APPLICATION AREA	AGENCY OUTLOOK	VENDOR OUTLOOK ON CHANGE
APPLICATION AREA	OUTLOOK	ON CHANGE
DATA BASE MANAGEMENT	GROWING	GROWING RAPIDLY
GENERAL STATISTICAL ANALYSIS	GROWING SLIGHTLY	GROWING SLIGHTLY
TSO TIME	FALLING SLIGHTLY	STAYING CONSTANT
AGENCY SPECIFIC	FALLING	STAYING CONSTANT
BATCH PROCESSING	FALLING SLIGHTLY	FALLING MODERATELY
GENERAL FINANCIAL AND ECONOMIC	GROWING SLIGHTLY	GROWING SLIGHTLY
PROJECT MANAGEMENT	GROWING SLIGHTLY	STAYING CONSTANT
UTILITY PROCESSING	FALLING SLIGHTLY	FALLING SLIGHTLY
SCIENTIFIC AND ENGINEERING	STAYING CONSTANT	STAYING CONSTANT
GRAPHICS	GROWING RAPIDLY	GROWING RAPIDLY
APL	GROWING RAPIDLY	GROWING RAPIDLY

- Agency respondents mentioned NOMAD and FOCUS in relation to development capabilities.
- Comments were made by some agencies and vendors that System 2000, 204, and TOTAL had to be used because applications currently required them. No respondents spoke about these products enthusiastically, however. They spoke about additional coding being required and limitations in retrieving information.
- Statistical packages and aids also deserve interest since they are growing and are of high interest to agency respondents.
- Vendors should be equipped with financial and project management packages. These applications are growing and are moderately important. The latter has been underestimated in importance by vendor respondents and is growing in importance in both DOD and civilian agencies. Some civilian agencies noted that a different approach is needed for project management in government areas.
- The use of graphics software and APL is increasing rapidly, and these items have a current newsworthy appeal to agencies and vendors. Economic means to make them available to users and prospects should be considered, even if they have low importance at present.

B. SELECTION CRITERIA

- As Exhibit V-4 shows, there is agreement in the two major selection criteria,
 but considerable disagreement on most of the others.
 - Location of hardware is much less important to agency respondents than to vendor respondents.

SELECTION CRITERIA

CRITERIA RANKED IN IMPORTANCE BY AGENCY	AGENCY RANKING*	VENDOR RANKING*
COST RELIABILITY PROPRIETARY SOFTWARE PACKAGES OPERATING SYSTEM DOCUMENTATION PROPRIETARY PACKAGE CAPABILITIES UTILITIES TRAINING DATA BASE SYSTEMS INTERACTIVE RESPONSE EASE OF USE COMMUNICATIONS NETWORK COMPATIBILITY TO IN-HOUSE HARDWARE USED REPUTATION BATCH RESPONSE PROGRAMMING LANGUAGES	4.9 4.6 4.5 4.5 4.5 4.3 4.3 4.0 3.8 3.8 3.8 3.6 3.6 3.6 3.5 3.4	5.0 4.6 3.8** 2.6*** 3.6** 2.6*** 4.0 4.5** 2.8** 3.0* 2.6*** 2.0*** 2.6*** 4.0** 2.6**
CONSULTING PROFESSIONAL SERVICES LOCATION OF HARDWARE	3.1 2.8	3.4 4.0***
TECHNICAL FEATURES	2.2	2.0

^{*1 =} LOW; 5 = HIGH

2 4

^{** =} DIFFER. IN RATING OF 0.5 TO 1.0

^{*** =} DIFFER. IN RATING OF 1 OR MORE

- . Some agencies still stress a nearby location as a factor.
- A nearby location seems like a safety blanket to agencies who are caught between tight deadlines and no provision for alternative means of having jobs done.
- . Most agencies realize that nearby remote printing and input capability are all they need.
- The fact that many criteria appear more important to agencies than to vendors suggests a growing level of sophistication among users of data processing. These criteria include proprietary packages/capabilities, operating systems, utilities, documentation, training, ease of use, and communications networks.
- Some criteria are less important to agency respondents than they have been in the recent past since service has improved. Response times are better, and a vendor may put customer work on a more responsive system if there is a complaint.
- Overall, agency respondents give more emphasis to a greater number of criteria than vendors do. Some vendors capitalize on this, and emphasize their breadth of capabilities.
- Agency respondents also emphasize the total aspect of services more than vendor respondents do, as illustrated in Exhibit V-5.
 - Agency respondents want their questions on present service, capabilities, or data processing in general to be followed up closely and answered by someone they know, or who can pick up the thread of contact rapidly.
 - Some vendors have "hotlines" to record emergencies or all requests which address the need for service.

OTHER SELECTION FACTORS

FACTOR	EVALUATION BY AGENCY RESPONDENTS	EVALUATION BY VENDOR RESPONDENTS
HIGH LEVEL OF SERVICE TO USERS AND PROSPECTS	HIGH	HIGH
CLOSE FOLLOW-UP OF SERVICE AND CONTACTS	HIGH	MEDIUM
CONTINUITY OF CONTACT	HIGH	MEDIUM
HAVING A WELL PREPARED GOVERNMENT BOOK	MEDIUM	MEDIUM
ROLE OF IRM	IN QUESTION	MEDIUM

- Some vendors have regular, even daily, meetings to follow up requests received on the "hotline" or by other means. The meetings ensure that follow-up is timely and accurate and that continuity of contact is achieved to the extent possible.
- Some vendor respondents use their facilities for user response to answer requests for information from prospects or any agency. Two vendors who did this noted that it was a means of learning about new work or making friends who would pass on information. Some agencies commented upon this means of prospecting by vendors.
- The IRM may become a strong factor in RCS decisions. Many agency respondents still have questions about the role of the IRM, but vendors note that the IRMs in place tend to want changes, changes in the vendors that have been used, and changes from RCS to other means of data processing, etc.

C. PROCUREMENT PROCESS

- The procurement process is more of a problem to vendor respondents than to agency respondents, as shown in Exhibit V-6.
 - Agencies and vendors both note that the process can take a long time, but only 26% of agency respondents reported this as a problem, whereas 100% of the vendor respondents did.
 - Agency and vendor respondents both note that the number of vendors to evaluate is a problem.
 - Several agency respondents stated that they would like the process to provide a better means of reducing the number of vendors that they must contact.

VIEW OF PROCUREMENT PROCESS

DESCRIPTION	MAGNITUDE OF ITEM TO AGENCIES	MAGNITUDE OF ITEM TO VENDORS
LENGTH OF TIME	MEDIUM (26%)	VERY HIGH (ALL VENDORS)
TOO MANY VENDORS	MEDIUM	MEDIUM
PROCESS IS HARD TO FOLLOW	LOW	MEDIUM
PROCESS MAY NOT ACHIEVE BEST CHOICE	LOW	MEDIUM
SPECIFICATIONS ARE SLANTED	NOT REGARDED AS A PROBLEM	MEDIUM
UNBALANCED BIDDING	NOT REGARDED AS A PROBLEM	MEDIUM

with the



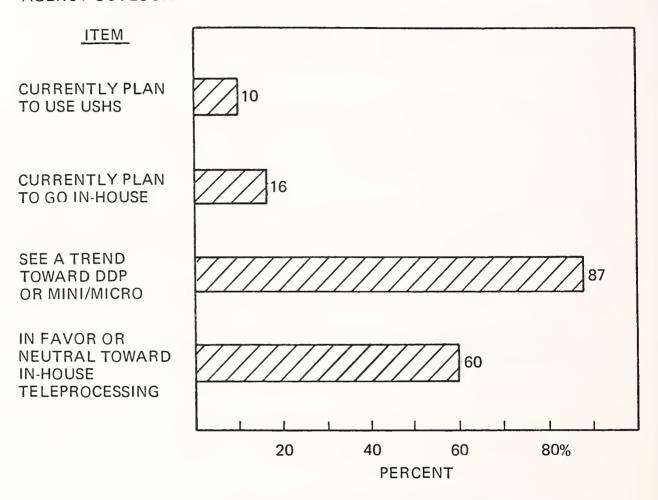
- Agency respondents seem pleased with the RFP procedure which makes vendors prepare a cross-reference between their capabilities and the requirements of a job. In addition to qualifying vendors, it provides a means of having vendors disqualify themselves.
- Some agencies seem willing to use specifications that are slanted to reduce the number of vendors as well as to favor factors that they feel are important.
- These points emphasize the need for vendors to be recognized by selected agencies as vendors that they want to continue to do business with.
- Vendor and agency respondents both feel that vendors need a lawyer or someone trained in procedural details to monitor the procurement process and bids that are prepared.

D. ALTERNATIVES TO VENDOR TELEPROCESSING

- Exhibit V-7 indicates that most vendor respondents are not aware, in general,
 of the potential for in-house solutions to problems.
 - Most agency respondents see a trend toward in-house solutions and 26% have plans to go in-house.
 - Sixty percent of agency respondents would not oppose in-house teleprocessing.
 - Nearly half of the vendor respondents do not think USHS or standalone minis will make any meaningful market penetration.

ALTERNATIVES TO FEDERAL RCS

AGENCY OUTLOOK



VENDOR OUTLOOK

ITEM	MODERATE USE	LITTLE USE
USHS	11%	44%
IN-HOUSE TS	0	22
DDP	0	11
STANDALONE MINI/MICRO	11	44

- Some vendors seem aware of the changing situation and have developed strong arguments (or positions) against minis, USHS offerings for the federal RCS market, or plans to offer minis when necessary. One vendor respondent has a position prepared to discourage minis and a plan to offer minis when that is wise.
- In an interview, a field GSA officer showed INPUT a GSA booklet with a front-page article entitled "DDP under TSP." He was engaged in a pilot venture, together with two other regions, which was going to acquire USHS.

VI STRATEGIES IN THE FEDERAL MARKET

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VI STRATEGIES IN THE FEDERAL MARKET

A. RESPONDENT APPROACHES TO THE MARKET

- The market approaches of vendor respondents are summarized in Exhibit VI-1.
- Vendors A and B offer software packages in the application areas of high and medium importance to agency respondents, including data base, TSO, statistical, financial modeling, and project management packages.
 - Both offer enhanced TSO capabilities that appeal to agency respondents.
 - Both vendors, particularly vendor A, believe that they offer products that are superior or equal to competition in all areas except scientific and engineering (where CDC may have better products) and data base (where NOMAD and FOCUS may have some advantages).
- Vendors A and B also rank high in a number of the selection criteria and other factors of importance to agency respondents, as discussed in Section IV.
- Vendors A and B do not want to compete on the basis of the lowest price in general, but both are prepared to emphasize low prices when necessary.

MARKET APPROACHES OF VENDOR RESPONDENTS

VENDOR	MARKET APPROACH	VOLUME OF RCS BUSINESS
A	 CLOSE SUPPORT INTENSIVE FOLLOW-UP INTENSIVE PROSPECT HUNTING WIDE RANGE OF APPLICATIONS SCORES HIGH (87) ON SELECTION CRITERIA BIDS HIGH NUMBER OF JOBS BENDS PROCUREMENT PROCESS IF POSSIBLE EMPHASIZES CONSULTING/PROF. SERVICES HAS AN APPROACH TO MINIS 	VERY LARGE
В	 CLOSE SUPPORT GOOD FOLLOW-UP SEARCH FOR LARGER JOBS GOOD RANGE OF APPLICATIONS SCORES HIGH (87) ON APPLICATION CRITERIA BIDS SELECTED JOBS WORKS WELL WITH PROCUREMENT PROCESS OFFERS USHS 	LÄRGE
C	 CLOSE SUPPORT (TO THE EXTENT NECESSARY) EMPHASIZES PRICE MODERATE LEVEL OF PROSPECTING GOOD RANGE OF APPLICATIONS SCORES LOW (66) ON SELECTION CRITERIA BUT HIGH ON A CRUCIAL SET BIDS HIGH TO MODERATE NUMBER OF JOBS STRESSES KNOWING PROCUREMENT PROCESS HAS ARGUMENTS PREPARED AGAINST MINI 	SMALL

EXHIBIT VI-1 (continued)

MARKET APPROACHES OF VENDOR RESPONDENTS

VENDOR	MARKET APPROACH	VOLUME OF RCS BUSINESS
D	 MORE LIMITED SUPPORT AND FOLLOW-UP SEARCH FOR NEWER USERS AND DATA BASE APPLICATIONS LIMITED RANGE OF APPLICATIONS SCORES LOW (60) ON SELECTION CRITERIA BIDS MODERATE TO SMALL NUMBER OF JOBS FINDS PROCUREMENT PROCESS UNFAIR 	MEDIUM
E	 GOOD LEVEL OF SUPPORT AND FOLLOW-UP MODERATE LEVEL OF PROSPECT HUNTING GOOD RANGE OF APPLICATIONS SCORES LOW (57) ON SELECTION CRITERIA BIDS MODERATE NUMBER OF JOBS AGRESSIVELY HUNTS OUT SLANTED PROCUREMENT SITUATIONS WILL PUSH UNIQUE FACILITY MANAGEMENT APPROACH NO MINI APPROACH 	MEDIUM
F	 GOOD LEVEL OF SUPPORT AND FOLLOW-UP TO LIMITED NUMBER OF USERS MODERATE TO LOW LEVEL OF PROSPECT HUNTING GOOD RANGE OF APPLICATIONS SCORES HIGH (80) ON SELECTION CRITERIA BIDS MODERATE NUMBER OF JOBS FEELS NEED TO GAIN MORE PROCUREMENT KNOWLEDGE EMPHASIZES CONSULTING/PROF. SERVICES AND FACILITY MANAGEMENT CAN OFFER MINIS MAKING BIG INVESTMENT IN DATA BASE 	MEDIUM

EXHIBIT VI-1 (continued)

MARKET APPROACHES OF VENDOR RESPONDENTS

VENDOR	MARKET APPROACH	VOLUME OF RCS BUSINESS
G	 GOOD TO LOW LEVEL OF SUPPORT AND FOLLOW-UP MODERATE TO LOW LEVEL OF PROSPECT HUNTING GOOD RANGE OF APPLICATIONS SCORES LOW (57) ON SELECTION CRITERIA BIDS MODERATE LEVEL OF JOBS KNEW PROCUREMENT PROCESS FAIRLY WELL WOULD HAVE PUSHED PROFESS. SERVICES NO MINI APPROACH 	OUT OF BUSINESS
Н	 GOOD LEVEL OF SUPPORT INTENSIVE LEVEL OF FOLLOW-UP MODERATE LEVEL OF PROSPECTING GOOD RANGE OF APPLICATIONS SCORES MEDIUM (74) ON SELECTION CRITERIA BIDS MODERATE LEVEL OF JOBS KNOWS PROCUREMENT PROCESS WELL EMPHASIZES PROFESSIONAL SERVICES AND FACILITY MANAGEMENT HAS USHS READY 	JUST DROPPED IN BUSINESS VOLUME

- Vendor A uses techniques such as unbalanced bidding and an attractive schedule of discounts in the TSP offering book to make its pricing appear attractive.
- Vendor B is prepared to respond with aggressive new prices when it is necessary in bidding.
- Both vendors are prepared to offer a minicomputer or USHS approach in selected instances.
- Vendors A and B both mentioned that they could call on resources and personnel outside the Washington area for certain types of aid.
- Vendor A provides a greater set of total services and has more people and more intensive follow-up methods for supporting customers and prospects than vendor B.
- Both vendors agree that the best way of competing in the federal market is to be totally committed.
 - This means investing in all products and services of interest to the market.
 - Both vendors state that they would be ready to incur bad years and possible losses while continuing to invest.
- The other vendors described in Exhibit VI-1 have more constrained approaches,
 as listed below:
 - Vendor C emphasizes low prices, capability in the most important application areas, and controlled but good service to a selected number of agencies (customers and some prospects). Resources from areas outside Washington are occasionally used to supplement the offerings of vendor C.

- Vendor D emphasizes data base, together with USHS, contact with newer users, and competitive prices.
- Vendor E emphasizes tough bidding, low prices, upsetting slanted specifications, good technical support, and facility management in selected market areas.
- Vendor F emphasizes software, training, facility management, and support from remote facilities.
- The market approach of vendor respondents is compared to recent and planned growth figures in Exhibit VI-2.
 - The approaches of vendors A,B,C,D, and E warrant investigation based on their performance.
 - The growth and expectations of vendor A make a strong argument for following the approach this vendor advocates, provided there is a willingness to make the necessary investment.
- The approach of vendor C is of interest since it illustrates that prices can be low, services can be constrained, and a successful growth pattern can be obtained.
 - Vendor C limits the sales and marketing staff.
 - Letters of interest from agencies and items in the <u>Commerce Business</u>

 Daily are used for leads.
 - An effort is taken to avoid much effort on bids that are obviously slanted.
 - An illustration was given of DOT, where bids have been slanted, according to vendor C.

EXHIBIT VI-2

SUCCESS VERSUS MARKET APPROACH

MARKET APPROACH OF VENDOR	RECENT GROWTH IN RCS (AAGR)	PLANNED GROWTH (AAGR)
А	100%	40%
В	30	10-20 (OR BETTER)
С	100	50
D	50	40
E	30	25
F	?	15
G	OUT OF E	BUSINESS
Н	FELL	25

- Vendor C expects new management in DOT to provide fairer specifications and truly price-competitive bids, which this vendor would be more responsive to.
- . Specifically, vendor C anticipates that recompetes will occur by this fall, which would be decided primarily on the basis of price.
- Vendor D depends upon the appeal of its DBMS to newer users in the Washington market, as noted previously.
 - Pricing is within the acceptable price range for the market.
 - The range of software packages and services which vendor D offers are competitive with most others, but not with the largest vendors in the market.
 - This strategy indicates that the appeal of a product can be matched with market seaments.
- Vendor E displays a defensive strategy that may be capitalizing on present market situations.
- The RCS vendors with larger revenues had ratios of sales to technical personnel that were close to one to one.
 - Vendor A had 30 people in sales functions and almost that many in technical support.
 - Either sales or technical people could be moved to non-government accounts that were related functionally to government business (e.g., to business with large investments in human resource systems).

- Some sales people have technical and/or product support roles as well.
- Vendor B has over 20 technical people and about 30 in sales positions.
 - . Almost 20 of the sales personnel are in junior positions which involve product support.
- Vendors with a smaller amount of government business tend to have a smaller number of sales personnel in relation to their technical staff.
 - Vendor C has four or five sales people and about ten technical people.
- Vendors A and B both maintain contacts with officials and users in government offices that have had influence in the past.
 - These contacts enable vendors to become aware of work before it is announced.
 - These contacts also let vendors know of opportunities in other government offices including situations where aid is needed immediately and a vendor.
 - Some vendors with a smaller amount of business also try to maintain these connections.
 - The risk of supplying service and spending time without tangible rewards is too high for these vendors in general, however.
 - Some smaller vendors complain about the informal contacts between vendor and agency personnel and hope that bids will be less influenced by such contacts in the future.

- It is possible that IRMs and new ADP management is becoming sensitive about this issue and will try to change some vendors on a regular basis.

B. OPPORTUNITIES FOR INFORMATICS

- INPUT assumes that Informatics will not choose a strategy similar to that of vendor A.
 - This strategy entails the risk of unprofitable years while investment in products and services is being made.
 - During a time of change in administration and hardware services, the risk of making incorrect investments would be increased.
- Informatics appears committed to maintaining and increasing revenue on an annual basis.
 - Steps can be taken in planning, bid preparation, pricing, products, selection criteria, and other factors of importance to agency respondents to support that objective.
 - Means of cost reduction can be considered that would support pricing strategies and investments in products and services.
- Steps should be taken in planning to address the Washington market as methodically as possible:
 - Market segments could be identified which would be the areas where attempts were made to develop or encourage business through as well as outside the procurement process. Specific prospects could be identified in the market segments as well.

- . Bids would generally be made to offices in these market segments.
- . All possibilities in these segments would not be bid and some bids might be made to offices outside these segments.
- . Bids would be made where pricing, capabilities, and other Informatics strengths or contacts provided opportunities.
- Market segments would be chosen on the basis of Informatics' past business, capabilities, past work, contacts, etc.
- The annual plan could relate revenue to the selected market segments as well as to products.
- Interim (e.g., monthly) plans could report success and loss of bids in the segments and relate those items to pricing or product deficiencies.
 - . These plans should track contact activity and relations with selected prospects as well as note when new prospects had been identified or old ones were dropped.
 - Information for the interim reports could be gathered from daily reports of contact with agency personnel and daily or weekly reports of bids lost.
 - . The bid team should be able to look at contact reports in many situations and estimate what service and support has been given to a prospect and what his selection criteria, product interests and pricing expectations are.

- Opportunities for small bids (below \$10,000) and facility management work as well as opportunities to help officials that are evaluating jobs would be acted upon by contact people with aid from the bid team when necessary.
- Opportunities to start work outside the procurement process on an ad hoc basis could be acted upon in the same way.
- Bids could always be prepared in an organized approach with the involvement of selected members of the office.
 - Several vendors have a team concept that expedites the preparation of bids.
 - Members of the team have expertise in the procurement process, pricing, and product capabilities.
 - This provides the opportunity to review and report the pricing and product capabilities which are winning bids when Informatics does not win.
 - Recommendations for real or cosmetic changes in price or enhancements to products could be based on the reports.
- The process of preparing and winning bids should start with service and contact in agency offices before the job is identified as one that will be put out for RCS bids.
- INPUT does not recommend that Informatics compete mainly on the basis of price.
 - A number of vendors are attempting to do this.

- Many agency respondents indicated that they tried to ensure that vendors who won bids had the products, capabilities, and services they expected.
- Pricing has to be aggressive enough to stay within the window of pricing that exists in this market.
 - The bottom of the window is established by newer vendors.
 - The top of the window must be estimated by studying bids.
 - Illustrations may be found in situations where product or service advantages have not won bids.
 - Vendor and agency respondents noted that Tymshare had lost bids recently on the basis of high prices, where the appeal of FOCUS as a product had been expected to win the bid.
- The monitoring of prices that win and lose bids of interest could be handled by staff members who coordinate responses to bids as noted before.
- The actual preparation of bids should be streamlined and coordinated by staff
 members who are familiar with the procurement process.
 - Vendor respondents who do this respond to bids much more quickly.
 - It provides an opportunity to monitor the process (and products) that are successful.
- INPUT recommends that Informatics capitalize on its strength in software products.
 - Informatics has other products not used in the federal market which might be introduced there.

- The present roster of products compares favorably with the offerings of most other vendors.
- Further advantages might be obtained through addressing the opportunities indicated in Exhibit VI-3.
- Choices should be based on an ongoing review of needs and bids in market segments of interest.
 - Data base will continue to be a significant criteria for vendor selection. Strengths of RAMIS and enhancements to it should be reviewed regularly.
 - . Steps could also be taken to offer enhanced TSO, financial modeling with linkage to econometrics, and five- to ten-year projection capabilities and project management with the features attractive to the federal market.
 - APL and graphics software should continue to be offered in the Washington market, in spite of the fact that they are currently of low importance to agency respondents. They are both a subject of interest to many agencies, and INPUT expects their use to increase rapidly.
 - Systems developed in APL, such as those developed by Informatics, for NHTSA could present a problem. Specialists in APL, such as STSC or I.P. Sharp may be able to offer enhanced and more efficient APL capabilities that will be attractive.
 - . If development is done in APL, a plan to upgrade APL capability when needed would be advisable. Alternately, packages or other software could be used together with APL to make conversion more difficult and costly.

EXHIBIT VI-3

OPPORTUNITIES FOR SOFTWARE PRODUCTS

APPLICATION AREA	REASON FOR IMPORTANCE	STANDOUT PRODUCTS	ESTIMATE OF INFORMATICS POSITION
DATA BASE	MOST IMPORTANT TO RESPON- DENTS, GROWING (MAY GROW VERY RAPIDLY IN DOD)	NOMAD, FOCUS	MODEL 204 – OLDER, NOT FRIENDLY, NOT GOOD DE- VELOPMENT TOOL INQUIRE – USER FRIENDLY, BUT NOT FLEXIBLE ENOUGH
9.			RAMIS-CAN COMPETE; CON- SIDER ENHANCEMENTS WHEN JUSTIFIED
STATISTICAL	HIGH IMPORTANCE, GROWING	SPSS, SAS	HAVE THEM
	STILL USED AND GIVEN HIGH IMPORTANCE	ENHANCED TSO, WYLBUR, ETC.	NOT PREPARED
FINANCIAL MODELING	IMPORTANT, GROWING	THOSE THAT LINK TO ECONOMETRIC DBs	NOT GENERAL ENOUGH, DON'T TIE TO ECONOMETRIC
PROJECT MANAGEMENT	MEDIUM IMPORTANCE BUT GROWING	THOSE WITH A NON-CPM AP- PROACH (E.G. BAR OR PHASE)	NOT PREPARED
	CURRENT INTEREST IN MARKET	STSC AND IP SHARP APL	HAVE PRODUCT - SUFFICIENT FOR OVERALL MARKET, BUT SUSCEPTIBLE TO COMPETITION FROM STSC AND IP SHARP
GRAPHICS	1	DISSPLA, TELL-A-GRAPH SAS GRAPHICS	HAVE PRODUCTS BUT MAY NOT BE OFFERED

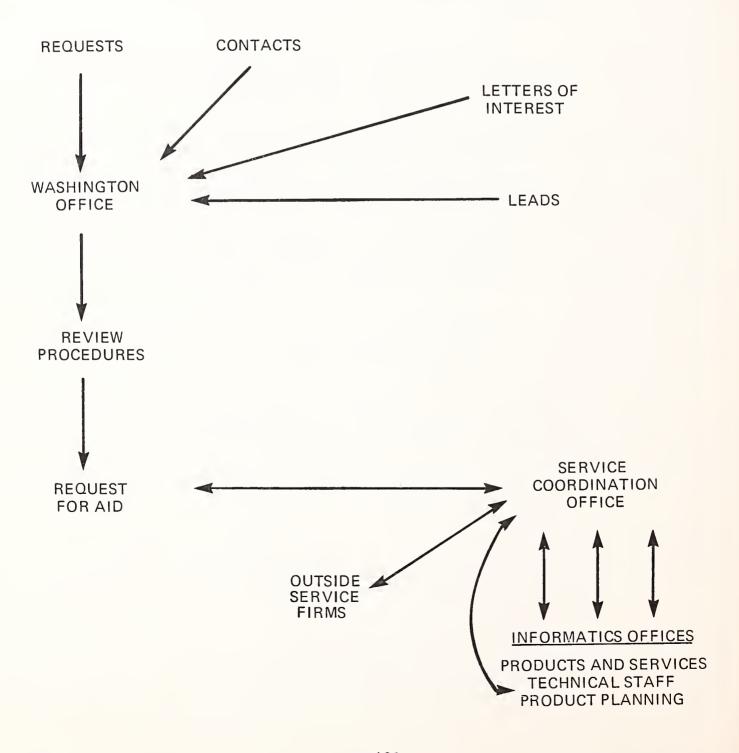
- The market may be further addressed by increasing the operating system and utilities offered to the federal market.
 - These capabilities were noted as important selection criteria for agency respondents in Chapter IV.
 - Some user respondents have become more sophisticated and are interested in VM/CMS, software packages that facilitate system development, etc.
- Informatics can also achieve market differentiation through services and support to customers and selected prospects.
 - Service could not be offered on the scale undertaken by vendor A.
 - An effort could be made to track and ensure continuity of service, as done by vendor A, to customers and prospects of interest.
 - . A daily review of contacts via the "hotline" or other means would be advisable.
 - Agency respondents noted that follow-up and continuity of service were factors in agency selection.
 - Contacts and requests should be documented so that response can be given which gives agencies a feeling of continuity of contact.
- Informatics could capitalize on an emerging trend in the Washington market, namely the use of support from remote offices to augment the capabilities of the Washington office.
 - Vendor respondents provide training, backup service, information on products, software packages used in other markets, facility manage-

ment, USHS, and other offerings to the Washington market from remote sites.

- Several vendor respondents noted that remote resources can provide the capability to respond flexibly as well as with economy.
- No vendors are coordinating all opportunities to serve the Washington market with remote resources in addition to or in place of local resources.
- Informatics could base such a function in the Eastern Regional Office in Fairfield, New Jersey, as shown in Exhibit VI-4.
 - Requests for information, services, personnel, training, new products, etc. would be forwarded from the Washington office as the result of contact or requests from government offices.
 - The support function in Fairfield would review the availability of resources there or elsewhere in the country.
 - . This could provide support for bidding some facility management jobs, where competition is less.
- Incentives such as commission sharing might be used when resources were borrowed to support the Washington office.
- When resources were not available, outside service firms could be used if the need was justified.
- The service coordination office should be run in coordination with a planning function in order to review and influence which requests are supported.

EXHIBIT VI-4

REMOTE SERVICE COORDINATION



- The use of a service coordination office would also provide Informatics with the opportunity for cost reduction.
 - The Washington staff could be large enough to support customers and selected prospects.
 - Personnel strength would be supplied from other sites of Informatics to provide information to customers and prospects, support for bids, and the staff for facility management and other contracts (at least on a temporary basis).
- Costs should also be kept at a low level by using remote computing centers to process Washington work.
 - Agency respondents noted that the location of hardware ranked low as a selection criteria.
 - Respondents have learned that their service may be from a remote computer, even when a vendor has a local capability.
 - Vendor B provides processing only from remote centers.
 - Some agencies still want the added security of local processing.
 - Several vendor respondents, including vendor A, admit that they cater to this situation.
 - These vendors are not aware of the low ranking that agency respondents now give to location, however.
 - An effort should be made to portray remote processing as part of an overall capability.

- The emphasis on high processing speeds, new operating systems and utilities, etc. at a remote site would aid this.
- The use of attractive remote job capabilities (a USHS or mini or high output printer) in the Washington office would aid as well.
- Informatics could also prepare a response to an area of increasing interest to agency respondents, the use of USHS or minicomputers.
 - A position could be developed to argue against the use of minis, when that appeared desirable.
 - Arguments used by vendor respondents include the shortages of personnel at government offices, rapid increases and decreases of work, and the possibility of work being consolidated on machines elsewhere. These arguments generally favor the use of RCS.
 - . Vendor A uses such an argument, unless it appears that the prospect favors a mini. Then, vendor A is prepared to offer a mini.
 - INPUT recommends that Informatics be prepared to offer a USHS or mini in view of the attitude of vendor respondents.
 - . A trend is developing for the consideration and use of hardware.
 - This capability can provide the opportunity for Informatics to compete aggressively for some bids, since it can reduce connect and other RCS charges.
- Facilities management may also provide an opportunity for Informatics.

- Cutbacks in personnel could provide more opportunities for facility management.
- This work is desirable, since it is not subject to the procurement process and number of vendors that RCS work is.
- Other vendors are also preparing to compete for this business.
 - Three vendor respondents mentioned an interest in this work.
 - Two of these vendors noted that they would support such work with personnel from offices elsewhere in the country if they won it.
- Facility management work should be pursued with agencies where good contacts have been made.
 - Agencies tend to award this business to vendors that they have been in contact with, or whose demonstrated capabilities in the federal market they respect.
 - This work could be supported from remote locations of Informatics, at least on a temporary basis, if contracts were awarded.
- A review of the opportunities discussed in this section is shown in Exhibit VI-5, together with a summary of steps that can be taken to address the opportunities.

EXHIBIT VI-5

REVIEW OF OPPORTUNITIES

OPPORTUNITY	NEXT STEP
1. ADDRESS THE MARKET WITH INCREASED PLANNING	a. PREPARE A METHOD OF RELATING PLANNED REVENUE TO ACTIVITIES (IN MARKET SEG- MENTS) E.G. MONTHLY REPORTING
	b. PREPARE A FORM TO DOCUMENT WHAT PRICING, PRODUCT DEFICIENCIES, AND/OR OTHER FACTORS WERE INVOLVED IN LOST BIDS
	c. DEVELOP CRITERIA FOR DECIDING WHEN BIDS SHOULD BE SUBMITTED, WHEN RESOURCES SHOULD BE COMMITTED, AND WHEN AID SHOULD BE REQUESTED FROM MANAGEMENT
2. CONCENTRATE WORK IN MARKET SEGMENTS	a. PREPARE A DISCUSSION DRAFT THAT SELECTS MARKET SEGMENTS BASED ON PAST BUSINESS, CAPABILITIES, PRODUCTS, CONTACTS, AND OTHER STRENGTHS
3. RESPOND METHODICALLY AND SWIFTLY TO BIDS AND OTHER OPPORTUNITIES	a. DESIGNATE A TEAM WHO WILL SPEND PART OF THEIR TIME SELECTING BIDS AND OTHER SIT- UATIONS TO RESPOND TO, PREPARING BIDS, AND DOCUMENTING SITUATIONS THAT ARE LOST (SEE 1-b)
4. BE PREPARED TO RESPOND TO PRICING NEEDS	a. REVIEW COSMETIC MEANS FOR IMPROVING PRICING SUCH AS COMBINATIONS OF CHANGES IN DISCOUNTS AND THE CHARGING ALGORITHM OR TECHNIQUES OF OFFERING UNBALANCED BIDS
	b. WHEN DOCUMENTATION SUPPORTS IT (SEE 3a), BE PREPARED TO OFFER AGGRESSIVE PRICES
5. REVIEW AND CONSIDER CHANGES IN SOFT- WARE PRODUCTS OFFERED, BASED ON DOCU- MENTED NEEDS OF MARKET SEGMENTS	a. CONSIDER OPPORTUNITIES IN DATA BASE, EN- HANCED TSO, FINANCIAL MODELING, AND PROJECT MANAGEMENT
	b. REVIEW APL DEVELOPMENT STRATEGY
	c. REVIEW DEVELOPMENTS IN INFORMATICS IN CAPABILITIES OFFERED WITH IBM OPERATING SYSTEMS (VM/CMS PARTICULARLY) AND OTHER UTILITIES

EXHIBIT VI-5 (CONT.)

REVIEW OF OPPORTUNITIES

OPPORTUNITY	NEXT STEP
6. IMPROVE SERVICE	a. IMPLEMENT DAILY REVIEW AND REPORTING OF ALL CONTACTS TO INSURE RESPONSE, FOLLOW UP, AND CONTINUITY OF CONTACT
	b. CONCENTRATE SERVICE IN MARKET SEGMENTS EXCEPT FOR SPECIAL SITUATIONS SELECTED BY MANAGEMENT (OR THE BID TEAM)
-	c. REVIEW THE ABILITY OF PROVIDING TECH- NICAL INFORMATION AND SUPPORT FOR BIDS AND SERVICES FROM REMOTE OFFICES
7. RESPOND TO HARDWARE SERVICES	a. PREPARE THE SALES STAFF FOR COMPETITION WITH SUCH OFFERINGS
	 b. CONSIDER WHAT PRODUCT OR MINI/MICRO MIGHT BE OFFERED TO MEET MARKET NEEDS OR OPPORTUNITIES
8. REVIEW FACILITIES MANAGEMENT OPPORTUNITIES	a. REVIEW OPPORTUNITIES IN SELECTED WASHINGTON MARKET SEGMENTS
	b. CONSIDER SUPPORTING SUCH SERVICES FROM OFFICES OUTSIDE THE WASHINGTON MARKET

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APPENDIX A: RESPONDENT PROFILE



APPENDIX A: RESPONDENT PROFILE

Vendors.

- Eight vendors were interviewed from a prioritized list supplied by Informatics.
- Respondents ranked between numbers I and II on the prioritized list.
- A vendor who recently left the market was also interviewed.
- The specific vendors interviewed were Boeing Computer Services, Martin Marietta, American Management Systems, ComNet, Neshaminy Valley Information Processing, Federal Computer Sharing Services, Datacrown, Rapidata and McDonnell Douglas.
- Respondents included five people in charge of federal business, two marketing directors, and two sales managers.

Agencies.

- Nine of 11 target agencies were interviewed; two declined interviews.
- Multiple interviews were carried out with GSA.
- Thirty-five interviews were carried out with 29 government offices.

- Six interviews were carried out with DOD agencies.
- Four IRMs, one procurement officer, eight directors of computer services or operations, three procurement analysts, and nine miscellaneous titles were among those interviewed.
- The specific agencies contacted included:
 - . Department of Transportation (3 interviews).
 - . Department of the Army (2 interviews).
 - Defense Logistics.
 - Department of the Air Force.
 - . Army Corps of Engineers.
 - . Department of the Navy.
 - Department of Education.
 - Department of Labor.
 - Federal Trade Commission.
 - Postal Services.
 - Health and Human Services.
 - . Department of Energy.

- . Department of the Interior.
- . Office of Personnel Management.
- . Department of Agriculture.
- . OMB (2 interviews).
- . GSA (3 interviews, 1 at a field office).
- . GAO.
- . Department of Commerce.
- . Community Services Administration.
- . Federal Maritime Commission.
- Veterans Administration.
- . National Institutes of Health.
- . Rail Road Retirement Board.
- . Small Business Administration.
- Bureau of Labor Statistics.
- . Census Bureau.
- . FCC.
- . Nuclear Regulatory Commission.

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APPENDIX B: QUESTIONNAIRES



FEDERAL GOVERNMENT TELEPROCESSING: USER QUESTIONNAIRE

(Questions marked "*" may be omitted during telephone interviews if there is time pressure.)

la. Why, in general, does your agency use teleprocessing services?

*1b. So that I can get an idea of the importance of teleprocessing to your agency, could you rank the relative importance of the following items?

*(5 = High; 3 = Medium; I = Low)

Importance*

In-house developed software run on your own hardware?

In-house developed software run on vendor-supplied teleprocessing?

Vendor-supplied software run on your own hardware?

Outside teleprocessing services?

Facilities management?

Vendor data communication

networks?

REASONS:

CATALOG	NO.	YIGS]

*Ic. How is teleprocessing procurement coordination and oversight organized for your agency? Which functions are performed by each group?

COORDINATION	<u>OVERSIGHT</u>

- 2. What do you estimate you spent on vendor teleprocessing and TSP vendor professional services in FY 1979 and FY 1980, and will spend in FY 1981 to 1983?
 - What is the reason for the rate of change?

	FY 1979	FY 1980	FY 1981	FY 1982	FY 1983	REASON I CHANG	
Total vendor tele- processing (\$ million)?							
TSP vendor profes- sional service?						£ 4	

			_		 	
CATALOG	NO.	ΥI	G	S		

4a. Which TP vendors do you use and why?

		TYPE OF	CONTACT
VENDOR	REASON	YOU CONTACTED THEM*	THEY CONTACTED YOU**
			

^{*}Describe method/reason; including RFP, reputation, reference from another agency, recommendation by consultant.

^{**}Describe method; including brochure, sales call.

*(5 = High; 3 = Medium; I = Low) (NOTE: Respondent can call them vendor "A", "B", "C", etc. if desired for How would you rate each of the vendor teleprocessing services you now receive? Vendor = _ confidentiality reasons.)

4p.

	SATISFACTION*	REASONS	CHANGES PLANNED
Range of software offered Reliability of:			
- Operating system - Application software			
- Hardware - Data			
- Communications network			
Training/documentation			
Ease of use			
On-going support			
Cost			
- Charge structure			
- Amount charged			
Technical features (e.g., graphics)			
(Describe)			
Other			

*5 .	What are the attitudes within your agency toward using teleprocessing vendors?
	How about multiple vendors?
	*(5 = Strongly Favorable; 3 = Neutral; 1 = Strongly Unfavorable)

	ATTITUDE*	REASON
Top Management	and the second s	
User Areas		
Data Processing		

- 6a. How well has the general process for procuring vendor teleprocessing services worked for your agency? What are your problems?
 - In general?
 - The procurement time cycle. (Discuss the approval portion of the cycle.)
 - Setting criteria, and performing evaluation and selection.
- *6b. If a user area in your agency identifies a teleprocessing application or vendor, what process is used to procure the service?
- 7. For how long a period are your contracts for teleprocessing services?
 - Under what circumstances have you modified the terms of contracts?
 - What percentage of FY 1980 contracts was sole source?
 - Has this percentage been increasing or decreasing? Why?

CATALOG NO. Y	IGS
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8a. What weight are the following factors given in your selection process?

(5 = High importance; 3 = Medium importance; I = Unimportant) (Don't prompt if possible.) If any of these involve mandatory requirements, please describe the requirement.

		WEIGHT	REASON
•	Reliability.		
•	Response time.		
	- Interactive.		
	- Batch.		
•	Cost.		
•	Hardware.		
•	Operating system.		
•	Utilities.		
•	Programming languages.		
•	Data base management systems.		
•	Compatibility with in-house system (describe if important).		
•	Application software offered.		
	- Proprietary software.		
	- Capabilities.		

CATALOG NO. YIGS	

-	Ease	of	use.	
-	Ease	of	use.	

•	Commun	ications	network
	COMMON	ICCITIONS	HEIWOIK

	_
•	Support.
_	

	Tra	in	ina.
_	110	11.1	1119

-	Documen	tat	ion

•	Technical features
	(e.g., graphics; describe).

-	Other.
	Unner.

8b.	Typically, how much weight is given to cost?	To technical factors?
	(Express as percentage.)	

- 9. Have you changed or added teleprocessing vendors in the last two years?
 - If yes, who? Why?

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- 10. What role does benchmarking play in your procurement process?
 - What percentage of procurements is based upon mandatory benchmarks by vendors?
 - What proportion of your benchmarks is prepared:
 - In-house?
 - By GSA?
 - By an outside vendor (name)?
- IIa. Have you replaced or are you planning to replace vendor teleprocessing services with alternatives?
 - Why?
 - If yes, which ones?
- 11b. Please give the year and extent of replacement accomplished or planned (dollars transferred or saved or percent of function transferred); please describe hardware.
 - In-house teleprocessing.
 - User site hardware supplied by teleprocessing vendors.
 - Turnkey systems.
 - Facilities management.
 - Mini/micro computers.

- How easily does your agency find it to comply with the cost comparison requirements in OMB Circular A-76? (5 = easy; 3 = moderately difficult; 1 = impossible).
 - Discuss.
- 11d. To what extent does the emphasis on minimizing processing costs interfere with the effective use of data processing in your agency? (5 = Never, 4 = Rarely, 3 = Sometimes, 2 = Often, 1 = Always)
 - Why?
- Ile. What impact do you think the recent Soliciter General's decision on including system conversion costs in evaluating procurements will have on your agency's:
 - Data processing in general?
 - Vendor teleprocessing?
- 11f. Would you want to see a different charging structure than that now used by your TSP vendor(s)? Describe.

- *12. Do you evaluate alternatives to your present teleprocessing vendor(s) on a regular basis outside of the contract cycle?
 - Why?
 - If yes:
 - Do you look at both other teleprocessing vendors or in-house options?

		٠. ٥
-	How	often?

- How?

13. What are the attitudes held by different groups within your agency toward using in-house teleprocessing?

*(5 = Strongly favorable; 3 = Neutral; 1 = Strongly unfavorable)

	ATTITUDE	REASON	OF CHANGE
Management			
User Area			
DP Dept.			

14a. What do you see as the general trends in the use of teleprocessing?

• Within the agency?

• Within the federal government?

• Within the general economy?

- 14b. Specifically, do you envision a trend toward DDP and/or the use of mini/micro computers in your agency? Why?
- 15a. What impact do you see Public Law 96-511 having on teleprocessing in your agency? (Setting up agency "Information Czar" and requiring a 5-year ADP plan.)
- 15b. What effect has the new administration already had on the use of vendor teleprocessing in your agency?
- 15c. What future effects do you foresee?

2. 5

FEDERAL GOVERNMENT TSP: VENDOR QUESTIONNAIRE

la.	What general trends do you see in the use and procurement of commercial remote computing services by federal agencies? How do these trends vary by agency?
lb.	What changes do you see in pricing, both in overall amounts and pricing structure?
2.	What effects do you believe the new administration will have on the use of commercial RCS? Have you seen evidence of this yet?

- 3a. Are commercial RCS becoming more or less important to federal agencies?
 - Why?
 - Does this differ by agency? (If yes, discuss.)

CATALOG	NO.	Y	Ι	G	S		

3b.	Can y		ntify th	is in terms	s of expe	cted mai	rket sizo	e for all	federal F	RCS
				9	(\$ MILLIC	<u>(NC</u>				
					FY 198	81	FY 19	82	FY 198	3
Civili	an Age	ncies					 			
Defer	nse Age	ncies								
3c.				firm's sale the generc					es to chai	nge
	•	If a di	fferenc	e is expec	ted,					
		-	Why?							
		-	Can yo	our growth	n be quan	tified?				
						RCS	PROF	ESSION	AL SERV	<u>ICES</u>
			•	1979						
		•	•	1980						•
			•	1981			•			
			•	1982						
			•	1983						

		_	_	_		 	
CATALOG	NO.	Y	Ι	G	S		

4.	ased on your experience, what is the attitude toward the use of commerci	al
	imesharing by:	

*(5 = Strongly favorable; 3 = Neutral; I = Strongly unfavorable)

		ATTITUDE *	CHANGE	REASON
•	Overhead agencies? (OMB, GSA)			
•	Congress?			
•	Individual agency management?			
•	User areas?			
•	Data processing management?			

5. In selecting a TSP vendor service, what weight do you believe is given to each of these factors by purchasing agencies now and do you think it will change?

*(5 = High importance; 3 = Medium importance; 1 = Unimportant)

		WEIGHT	REASON
	Reliability.		
•	Response time.		*
* * **	- Interactive.		
	- Batch.		
•	Cost.		
•	Hardware.		
•	Operating system.		
•	Utilities.		
•	Programming languages.		
•	Data base mangement systems.		
•	Compatibility with in-house system (describe if important).		

	CATALOG	NO.	Y	Ι	G	S				
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•	Application software offered.		
	- Proprietary software.		
	- Capabilities.		
	- Ease of use.		
•	Communications network.		
•	Location of hardware.		
•	Consulting/professional services.		
•	General reputation of references.		
•	Support.		
	- Training.		
	- Documentation.		*****
	- Technical.		-
•	Technical features (e.g., graphics; describe).		
÷	Other.		- <u>\$</u>

5b. Do you agree with the agency's view in the location of hardware?

					1	1	1	1	1	1
a	General financial and economic analysis software	General statistical analysis software	Scientific and engineering software	Utility processing (Fortran, Cobol, etc.)	Agency-specific software	management software	ise management	85	rocessing	
	d C	TSO time General financial and economic analysis software	TSO time General financial and economic analysis software General statistical analysis software	I financial and ic analysis software statistical analysis efic and engineering eigen	I financial and ic analysis software I statistical analysis e fic and engineering processing (Fortran, etc.)	financial and ic analysis software I statistical analysis e iic and engineering e processing (Fortran, etc.) -specific software	financial and ic analysis software statistical analysis e ic and engineering e processing (Fortran, etc.) -specific software management software	financial and ic analysis software statistical analysis le statistical analysis e ic and engineering e processing (Fortran, etc.) -specific software management software sse management	financial and ic analysis software statistical analysis e ic and engineering e processing (Fortran, etc.) -specific software management software is management sis management	TSO time General financial and economic analysis software General statistical analysis software Scientific and engineering software Utility processing (Fortran, Cobol, etc.) Agency-specific software Project management software Data base management Systems Graphics Batch processing

7a.	Does the existing vendor selection process seem fair to you in general? Does this differ by agency?		
7b.	How about particular parts of the process, such as:		
	•	MASC?	
	•	BA?	
	•	RFP Process?	
	•	Benchmarking?	
	•	Cost comparisons?	
	•	Deemphisis of qualitative factors?	
	•	Other?	
8.	Do you see federal agencies using alternatives to traditional remote computing services? If yes, what is motivating them and can you quantify the changes (year/\$)?		
	•	User site hardware (supplied by timesharing vendors).	
	•	Facility management.	
	•	In-house timesharing.	
	•	DDP (tied to in-house mainframe).	
	•	Standalone mini and micro computers.	
	•	Will this differ by agency? Why?	

CHANGE/REASON What firms do you see as the chief factors in remote computing sales to federal government? Do you think STRENGTHS/WEAKNESSES MARKET SHARE they will change in the future? NAME 6

10a.	Your v	olume of government business is reported to be around \$	
	•	Could you tell us how that business is broken down into approximate percentages of remote computing, professional services, facilities management, and other business?	
10b.	you ap	es your firm expect to be making any significant changes in the way the approach or service the federal remote computing market? Areas of tential change include:	
	•	Vendor professional services.	
	•	Proprietary software.	
	•	Vendor auditability (including pricing algorithms).	
	•	System security.	
	•	Other.	
lla.		What impact do you see Law 96-511 having on teleprocessing procurements and why?	

Have you seen any effects that the new administration has had or will have

on the procurement of remote computing services? Discuss.

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